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the 1981 White House Conference on Aging

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Report of Technical Committee on

CREATING AN AGE INTEGRATED SOCIETY: IMPLICATIONS FOR THE EDUCATIONAL SYSTEMS

NOTE: The recommendations of this document are not recommendations of the 1981 White House Conference on Aging, or the Department of Health and Human Services. This document was prepared for the consideration of the Conference delegates. The delegates will develop their recommendations through the processes of their national meeting in late 1981.

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PREFACE

The purpose of this report is to assist Conference delegates, and other readers, to better understand the profound effects of education upon our aging society and older Americans. Conversely, we have attempted to describe the effects of our aging population on educational policies and programs. Education and aging are inseparable. As we proceed with the societal responsibility of removing the many barriers that interfere with the participation of older adults in educational services of all kinds, we will witness the multiplication of the valuable contributions being made by the elderly. Also, and of equal importance, through educational programs for and about the aged the keys to a number of social problems including poverty, poor health, and age discrimination can be discovered. The benefits derived from a more literate and just society—and more enlightened and self-fulfilled older persons—will far outweigh the cost of the educational initiatives proposed in this report.

In preparing this report for the delegates to the 1981 White House Conference on Aging, the Technical Committee on Education employed the term "education" to include the widest possible range of intentional learning activities, formal and informal. Additionally, at several points, the report considers the need for fostering unplanned learning that will help shape informed societal attitudes about the processes of normal aging and the aged. The term gerontology is used to describe the full range of aging related activities, including those often dubbed as geriatric. The body of the report is divided into three major parts, dealing with educational opportunities for older learners and teachers; the development and improvement of training programs to prepare personnel to serve the elderly; and educational and public informational programs about aging for all Americans. The Summary and Recommendations sections underscore the need for effective policies and improved programs at all levels as a cost-effective investment in the future of American society.

I. INTRODUCTION

As our society ages at an accelerated rate over the next two decades, we will be presented with a new array of educational challenges and opportunities. Our response must take the form of advances in education at every level. Lifelong learning programs must be improved and expanded to provide older persons with the knowledge and skills necessary for survival, for new roles within and outside the work force, and for life enrichment. Existing barriers —financial, social, geographic, attitudinal, and physical—must be replaced with mechanisms that facilitate and encourage participation in these programs. We must at the same time redouble our efforts to create a better informed and more sensitive public—spanning all age groups—by articulating the processes of normal aging, underscoring the strengths and triumphs of the elderly, and exposing the needs and any indignities associated with growing old in America. Educational institutions and programs must be reoriented to the demographic facts of life—to the "graying" of our society. The place of the aged in every kind of educational program, formal and informal, must be reassessed and redefined as we are redefining "old age" in this new era. The potential contributions of older Americans must be identified and harnessed so that their experience and insights can benefit us all. Intergenerational programs of education must be systematically developed if we are to reap greater benefits from the participation and interaction of all age groups.

Education that benefits older people also benefits society. Education about health, for example, contributes directly to physical well-being and lessens the need for expensive remedial services. Skill training and retraining can help older people to participate productively in the world of work as well as the life of leisure, eliminating or lessening the need for income assistance. As we work toward an age-integrated society, we will be able to demonstrate that when the quality of life is improved for older people it is directly or indirectly improved for all people. We are interdependent both economically and socially.

As we develop and expand education to assist in the creation of a society that will serve and be served by the elderly, we must also extend our knowledge base about the processes of aging and about the aged. Only with an improved

and ongoing search for scientific knowledge can we avoid repeating the devastating myths and stereotypes that reinforce negative images, perpetuate inequities, and produce meaningless and purposeless programs for an already underserved population.

As we search for a new and better understanding of education and aging, we need to listen more carefully to the voices of older Americans. And if we do, we will hear about their joys, their problems, their concerns and interests, their similarities, and their differences. We will hear regional and ethnic dialects. We will hear men and women of all colors and many political and religious persuasions. We will hear the strong and the frail. We will hear the rich, the poor, and the in-between. We will hear the sick and well, the well-educated and the undereducated. We will hear those whose feelings were so well expressed by one older person who wrote in NEWSWEEK (August 11, 1980):

> That's another thing: open a newspaper or a magazine and you're hit with 'senior citizens must be taught to cook properly and should also learn which foods are the most wholesome, etc.' I try to grin and forget it, but end by grinding my teeth, unwisely. What's wrong with these people that they fail to realize that we are the experienced cooks, the experienced shoppers and the experienced housekeepers? Haven't we endured years of the blasted routine? Have we never heard of a protein or served nourishing meals? Do they suppose we have forgotten? I personally find it embarrassing and humiliating to read that if I go to this or that meeting, Ms. Newcomer will demonstrate the best way to break an egg . . . the years have equipped us senior citizens with a lot of strength, and the sense to tell life's little problems to go climb a tree. We have much to give to the younger generations. Some of us have become less spry, but most of us try our best to stay in the swim. Could more be asked?[1]

We will hear others as well; we will hear those on whom society has imposed new problems because they are now aged, and others whose problems have encumbered them all their lives—the problems of being poor, handicapped, or members of minority groups who have faced a lifetime of discrimination.

As we listen to all these older Americans, we recognize their individuality, and the grave error of stereotyping. At the same time, we become aware that they have many strengths, perceptions, experiences, and problems in common. In providing educational opportunities we must be alert to both the diversities and the commonalities.

Important advances have been made since the last White House Conference on Aging, in part because of the increased presence of older persons in our population. If the recommendations outlined in this report are approved and implemented, the lives of these older Americans will be greatly enhanced and this nation will be immeasurably enriched. Most importantly, we will have reaffirmed our belief in their rights, their responsibilities, and their potential as contributing members of our society.

II. SOCIAL TRENDS

Any educational endeavor takes place within a social context. It is helpful therefore to look at least briefly at historical and current social forces affecting the formulation, shaping, and implementation of policies about education and at how these policies in turn affect what is taught, by and to whom, how, and where.

In the United States, Federal, State, and local governmental units as well as private organizations have long viewed education as an essential component of a democracy. As early as 1785, the Federal Government had passed a series of laws addressing a variety of educational issues and problems. Recent legislation of significance for older people includes the 1979 Department of Education Organization Act and the 1980 amendments to the Higher Education Act. Funds for the implementation of the various laws, organizations, and programs come from a variety of sources including many federal agencies. This is true also of educational programs relating specifically to the study of aging.

Currently educational activities in the United States involve nearly 3 out of every 10 Americans.[2] The approximately 61 million Americans who are consumers and providers of education are distributed in formal educational systems from kindergarten through advanced degree programs. While there has been a gradual decrease in the number of students in secondary schools, there has continued to be an increase in students in institutions of higher education. In recent years there has been an increase in various types of adult education, including education for older people. Americans spend an increasing number of their years in educational activities, presumably with the result that education is of increasing importance in the formation of attitudes and values. Each succeeding generation of Americans and each cohort of older Americans is better educated than its predecessor—a fact of enormous significance for those who plan formal and informal education programs for the

reality that the old, the poor, members of minorities, and women still encounter barriers preventing their full participation in the nation's educational systems.

Currently several specific social trends are affecting our society and therefore our educational programs, including those programs relating to aging. Among such trends and forces are our diminishing natural resources, changing birth rates, inflation, and the numerically increasing older population. The field of aging has not been exempt from those influences affecting education in general. Even though the need for education about aging was recognized by a few pioneers in the 1930's and '40's, and a few institutions of higher education had strong programs in academic gerontology prior to the passage of the Older Americans Act in 1965, the greatest growth in the number of such programs did not come until after that date.

The increased number of academic programs in gerontology over the past decade has contributed to the knowledge we have about aging and the aged. It has resulted in a growing cadre of increasingly knowledgeable service providers, and has begun to provide to the public, of all ages, accurate information correcting negative images about aging and older Americans.

III. EDUCATION AS LIFELONG LEARNING

To live is to learn. People at all ages not only have the ability to learn, they do learn. Only by learning can they adapt to, cope with, and challenge the ever-changing internal and external environments encountered as they move through the life cycle. One series of studies has indicated that adults commonly spend 700 hours a year—10 percent of their waking time—in deliberate efforts to gain knowledge and skill.[3] Many of these learning projects are undertaken for highly practical reasons; others are motivated by curiosity, interest, or enjoyment.

This ongoing acquisition of knowledge has been captured by educators in the concept of "lifelong learning." The phrase affirms the words of John Dewey more than a half-century ago: "The idea of education as preparation and of adulthood as a fixed limit of growth are two sides of the same obnoxious untruth."[4]

Rapid social change intensifies the need for lifelong learning. A decade ago, delegates to the 1971 White House Conference on Aging were reminded that

such change had become a part of the fabric of their lives. They were told that for the first time in history, "Learning must be as continuous as change itself and inevitably lifelong in character."[5] The truth of this statement is even more clear in 1981. At present the impact of change and the need it creates for lifelong access to learning opportunities are most easily observed in our working lives. Because the source of change is usually rooted in the growth of knowledge and technology, few remain untouched. In some fields the rate of change is so great that practitioners need to relearn the skills and update the knowledge base of their occupations several times during their working lives. As occupations are modified, as new ones emerge and old ones disappear, we all must continuously engage in learning, unlearning, and relearning. Middle-aged and older persons are especially affected by the need to acquire new knowledge and skills in order to remain in the work force, reenter it after child-rearing or retirement, or pursue second careers. Figures released in 1979 indicated that more than half of all retirees would have preferred to remain in the work force, even if income from employment was not needed.[6] To increase the options of older workers, we must make a much wider range of learning opportunities available to them.

The impact of change goes far beyond the world of work. It has been said that no one lives in the world into which he was born. It may also be said of older people that they do not live in the world in which they came to adulthood. The world of retirement differs greatly from the world of work, if only in the amount of unencumbered time it offers. Retirement—and the passage into it—can be problematic. But many retirees are demonstrating that it can be a period of opportunity, one in which long-held avocations can be pursued or new interests and new roles discovered.

Beyond the personal changes we each experience as we age, there are historical and cultural shifts that make the experience of each generation of older persons different. New perspectives and new problems emerge. Energy, the environment, chronic inflation, and the status of women and minorities are examples of problems widely discussed today that received little attention a decade or two ago. If more older people are to realize the full potential of retirement, and if they are to participate as informed citizens in addressing public issues that vitally affect their welfare and American society, there must be a tremendous expansion in opportunities for education addressed specifically to their needs and circumstances.

Functions of Lifelong Learning

Education has many values for persons of any age, but for older people it is important in unique ways. It reduces social isolation by helping people stay actively involved in the mainstream of community life. It is a means for developing an understanding of the later stages of life; it can provide the skills necessary for living that part of life. It can enable older people to recognize and use the options open to them today. Some of the special functions of older adult education are described in the paragraphs that follow.

Education for economic improvement. For many retirees, the most critical problems are financial. Education can show how to stretch a limited income to cover daily needs through money management, consumer know-how, wise legal decisions, and careful selection of housing. Programs to help the elderly cope with financial problems may provide information on such topics as Social Security benefits, food stamps, and aid available through other Federal and State programs. Through education or re-education an older person may also qualify for paid part-time or full-time employment in a field suited to his or her interests and capabilities. Some measure of the potential demand for late-life vocational education was discovered when the Harris Survey asked older people whether they would be interested in training that would provide them with new job skills.[7] Applying the findings from that 1974 survey to more up-to-date population estimates, a recent publication suggests that those who want such training may total as many as 300,000 among those 80 years of age and older; 1.1 million of those aged 70-79 years; and 1.8 million aged 65-69.[8]

Education for new roles. One of the difficult challenges to an older person's resources—inner and external—is to create new roles suitable to changed individual needs and preferences and shifting societal conditions. The individual who has been led throughout a lifetime to assume that older people do nothing but sit in the sun, become crotchety, and decline mentally and physically, is likely to behave in accordance with that stereotype. Education can present evidence that older people have great potential, and that age need not interfere with the desire to continue a productive life and even try previously unexplored activities. Instruction and discussion can bring perspectives that enable the older student to clarify and broaden his or her view of life, and establish new goals and meaningful values in the present circumstances. Education can provide an opportunity to acquire a constructive view of leisure, and to express talents and interests that have been undeveloped or even unrecognized. The older student can explore new social relation-

ships in a purposeful setting, discuss feelings and fears with persons facing similar problems, and learn about the range of resources and activities available to today's retirees. Education can help in adjustment to new family relationships, and provide examples of how to demonstrate one's usefulness by contributing something important to others. It can also aid in the desire to bring about constructive change in society—to exert influence in improving one's own situation and that of other older Americans.

In a 1980 publication, Clark Tibbitts of the Administration on Aging emphasizes that numerous studies, surveys, and census reports point clearly to one conclusion: Most middle-aged adults and sizable numbers of those in their later years are, or would like to be, engaged in activities that enable them to feel they are contributing to the maintenance of society and to the well-being of others.[9] This common commitment to serving society takes on even more significance for public policy when it is considered in conjunction with a recent cross-national report that lifelong learning "can help elderly people to continue to grow, help them develop the understanding and confidence to participate in society, and to work for change.... In so doing, the elderly person derives substantial benefits, but in the final analysis society as a whole is the real beneficiary."[10]

Education for physical well-being. At any age, good health is a priceless asset. Education can provide the knowledge and skills needed to maintain and improve health through good nutrition, proper exercise, and sensible daily routines—which in turn can lead to renewed mental vigor. By means of such programs, older persons can also be better informed about the many health care programs, including visiting nurse services, local clinics, and insurance programs such as Medicare.

One form of health education of potentially great importance to many elderly persons, but as yet seldom offered by educational programs, provides knowledge and skills for coping with chronic health problems. Many physicians fail to see themselves as educators; they rarely give detailed guidelines for self-care, and so their older patients are unaware of day-to-day measures they could take to deal with their own problems. The growing popularity of self-help groups is a response to this need. When self-help groups of arthritics, for example, are able to draw on professional knowledge and other educational resources in obtaining reliable information and sorting it from quackery, they can effectively promote optimal functioning throughout the life span.

Education to enrich life. New attitudes, new skills, and new interests acquired through education can lead to self-fulfillment that results in a richer and happier life for the older person. For some, this may involve acquisition of long-wanted basic educational skills. For others it will relate to cultural aspects of life that may have become more significant with age, or the testing and deepening of values that may be a heritage for succeeding generations of Americans.

Involvement in education can maximize the ability to learn and maintain mental alertness. Just as physical exercise tones the body, systematic mental activity can sharpen one's mental processes.

As education helps the older individual continue to cope with changes in both self and society, it maintains mental stability and competence through growing confidence and control over one's own destiny. Deeper understanding of one's self can come through study of the thoughts of others or group sessions in which the individual is encouraged to examine his or her own feelings. Creative endeavors may bring out latent talents and provide satisfying opportunities for self-expression. In most older persons, scholars tell us, there is not only demonstrated ability but also a reservoir of unexpressed talent and interest which could be activated to make life far more stimulating and rewarding.

Education and Lifelong Learning—The Present Situation

Learning and education are not synonymous. Education is only one aspect of learning, one means by which it can be accomplished, but it too must be seen as a lifelong process. Education for older adults encompasses all those activities in which they engage for the specific purpose of learning. An important aspect of this definition is its breadth. It does not restrict our view of education to formal instruction in schools or school-like settings; rather, it extends it to encompass the broad panorama of activities in which older adults engage in order to gain new knowledge and skills. These include informal educational programs in settings such as libraries, museums, and senior centers.

Education also takes place through solitary learning; it has been estimated that 70 percent of all learning projects are planned by the learner, and involve neither a group nor an instructor.[11] Lifelong learning therefore requires that we view education not only in terms of formal programs to meet the needs of learners, but as a process that takes place in many ways and many places. Most lifelong learning occurs outside of schools, and this is especially true for

older learners. Surveying the sources of adult education in 1978, the National Center for Education Statistics (NCES) found that among participants aged 65 and older, nearly three out of every five were enrolled in programs offered by organizations, agencies, business and industry, or private tutors, rather than by educational institutions.[12] If the uncounted numbers of older persons engaged in self-directed study were included in these statistics, it is obvious that education in a "formal" mode, within the walls of institutions established primarily for this purpose, is overshadowed by the scope and extent of the "informal" education opportunities now being utilized by older learners. For the many who live in communities without colleges, such settings as libraries and churches may often provide the only readily available educational resources.

Nevertheless, opportunities for older adults to participate in classroom instruction have expanded markedly. A growing number of colleges and universities offer programs for older people or special inducements such as tuition waivers and reductions. Community colleges have been especially responsive to their educational needs; the above-mentioned 1978 NCES survey showed that 17.57 percent of participants 65 and older were in programs conducted by two-year institutions, a proportion second only to that for private community organizations (19.82 percent). Both can be expected to provide continuing leadership in education for older adults. Community education programs conducted by local school districts have become another particularly important source of education for older learners, including the many who are taking advantage of the retirement years to earn a long-deferred high school diploma. The proportion for whom this is an educational goal can be expected to decline; although fewer than 40 percent of those now 65 or older are high school graduates, approximately half the older population will be in this category by 1990, and the figure will continue to rise.[13]

Whatever the setting for instruction, the range of topics relevant to the interests of older learners seems limitless. Looking at only one aspect—the opportunities offered by colleges and universities—the Academy for Educational Development in 1978 listed 900 courses taken by older adults.[14] Grouped by subject matter, 38 percent of these courses were on academic subjects, 36 percent were hobby and recreation courses, 22 percent were in the areas of public information and consumer education, and 3 percent were work-related topics.

One longtime advocate of education for the aged has recently used the phrase "education takes off" to describe the increased activity in older adult education.[15] Clark Tibbitts attributes the increase to a number of factors, including

new interest and awareness that developed as an indirect effect of the 1961 and 1971 White House Conferences on Aging. In addition, Tibbitts underscores the significance of research that demonstrates clearly that older people maintain the capacity to learn, along with research showing that adults who participate in several types of activities and organizations enjoy greater life satisfaction. These facts combined with others—the growth of senior centers and organizations of older adults, the increased interest of older persons in second careers and re-entry into the work force, the spread of the concept of lifelong learning and the concomitant development of adult education, with increased readiness of educational institutions to offer services to older adults—suggest that we are on the verge of a lifelong education explosion.[16]

It has been reported that at least 18 million adults participate in some form of organized instruction. Estimates vary, but it is believed that perhaps a half-million of them are older adults.[17] If this figure is accurate, then less than 2.5 percent of the over-65 population is now participating in such programs. It is important that we learn more about why other older adults do not take advantage of formalized educational opportunities.

Research data show that for all adults several factors are associated with decisions to participate in educational activities. Among them are age, educational attainment, occupational status, income, community type (e.g. central city, suburban, rural residence), and geographic region (which may affect access to educational programs). However, the two most important determinants are previous schooling and age. Nine of every ten adults participating in educational programs in 1975 were from the 63.6 percent of the adult population that had completed high school.[18] Further studies confirm that the greater the amount of previous education, the greater the likelihood that an adult will participate in further organized learning opportunities: an indication that (a) those who might benefit most are the least likely to engage in educational activities, and (b) as educational levels continue to rise among older people, the demand for learning opportunities may increase markedly. The effect of age is quite different: After early adulthood, participation in education decreases as age increases, with the sharpest decrease after age 55. This may not be true in the future, however. Race and sex appear to have relatively little influence in themselves. Because of such factors as level of educational attainment, however, the participation level of minorities is lower. Similarly, with other factors controlled, women are somewhat more likely to be participants than men (55 percent vs. 45 percent).[19]

Conclusions such as these are valuable, but it is important to understand that demographic variables tell us relatively little about the characteristics of adult learners. After examining the influence of such variables on participation in adult education, one study reported that they identified only 10 percent of "whatever it is that leads adults to participate in and drop out from" adult education.[20] In other words, there remains much more to learn from future research about the factors affecting participation.

Although participation in adult education declines with age, it is encouraging to note that the number of older persons taking advantage of educational opportunities appears to have increased sharply during the past decade. One study reports that between 1969 and 1975, participation by adults aged 55 and over increased almost five times as fast as their number in the population.[21] This increase is likely to continue, particularly as a broader array of educational opportunities becomes available, and as those who become old have had a higher level of previous schooling. Among older Americans, the median number of years spent in school has risen from 8.3 to 10.3 in less than two decades, and according to the National Clearinghouse on Aging can be expected to rise to 12 years by about 1990.[22] It is significant that in 1976, although the overall median was 10.3 years of schooling for those 60 and over, the figure ranged from 12 years for the 60-64 age group to about 9 years for those 75 and over. In 1978, among Americans 65 and older, 9.4 percent of all men and 7 percent of all women had completed at least four years of college.[23]

In planning educational programs to meet tomorrow's demands and opportunities, it is also useful to consider some additional characteristics of older adults who have already been participating in organized instruction. Of approximately a half-million people 65 and over reportedly engaged in organized instruction in 1978, almost four-fifths (400,000) were not in the work force. Not surprisingly, a significant majority were women. Like adult learners in general, these older Americans tended to be non-Hispanic white persons characterized by higher educational attainment and higher income than adults not involved in educational activities.[24]

K. Patricia Cross, a close observer of lifelong learning in the United States, has summarized some of the other characteristics of older learners. She writes:

> As a group, older learners are not interested in credit or formal recognition of any kind. They are participating in educational activities primarily for pleasure, for their own satisfaction, and to meet and be with other peo-

> ple. In . . . (a) California study almost half of the potential learners over the age of 60 said that a primary motivation for their participation in learning activities was to meet new people. Yet [National Center for Education Statistics] data show that older learners are over-represented in most forms of 'lonely' learning. They, more than other age groups, use television, radio, and private lessons. These forms of home-delivered education are consistent with the strong priority given convenience of location by older people, but there would appear to be a need for more socially-interactive modes of learning.[25]

In summary, today's older students are like other adult learners in some basic respects. They tend to be persons of relatively high educational attainment and to be generally active. In other respects, they differ. Because their percentage in the work force is much lower than that of other age groups, the educational interests of many older people do not tend to be job-related. Rather, their interests reflect late-life concerns with retirement, leisure, and social relationships. Although the number of older adults in educational institutions has been increasing rapidly in the past decade, they still make up a very small percentage of all adult learners and an even smaller percentage of the total older population. The brute fact remains that after early adulthood, participation in organized instruction declines sharply with age. Many older persons participate in education programs, but most do not.

It is obvious that present efforts, as measured by participation, do not meet the educational needs of older adults. The rapid increase in the number of older learners in response to expanded opportunities over the past decade suggests that there is a significantly greater demand for education than is currently being met. The demonstrated interest of older adults, the demographic shifts, and the research evidence all point to an exciting era ahead in education for older adults. Intensive planning should be under way now in a wide variety of informal educational settings, as well as in educational institutions at all levels, if the nation is to make the most of this unprecedented opportunity.

Enormous possibilities are open for involvement of the private sector in education for and by aging individuals, and about the aging society. The uncertainties of public funding give new importance to the educational role of community agencies, churches and synagogues, business and industry, trade unions, associations of older persons, and others outside the formalized educational system. By drawing on existing resources, these organizations are in a position to develop and provide a wide range of significant learning opportunities at very little cost. The various programs of preretirement education

offered for many years under a variety of auspices, and the successful endeavors of such groups as the American Association of Retired Persons/ National Retired Teachers Association, the National Council on the Aging, and the Gray Panthers, are indicative of the range and quality of learning experiences that could be offered and the diversity of settings in which they could take place, if the private sector were to focus more adequately on the interests of older persons. As we look ahead, the new challenge for both the educational system and the private sector are great. Writing in the *North-Western Educator,* Bernice Neugarten has expressed it succinctly:

> When we add up the facts that a large proportion of the huge population of older people have had some postsecondary education in their youth, that the large majority has had at least some forms of systematic learning experience in the intervening years, that generally speaking the more education a person has had, the more education that person wants, that the large majority of older persons have had rich occupational and community and other life experience on which to draw, then the picture emerges of . . . a population with enormous potential for learning. It is, however, a population that is going largely unserved by educators.[26]

Barriers to Education

Many barriers that prevent older people from utilizing formal educational resources have already been mentioned. They fall into three categories: "situational," "dispositional," and "institutional."[27]

Situational barriers are those arising from one's situation in life at a given time. The cost of an educational activity is one of these, and is the most frequently mentioned barrier to educational participation. Cost can of course be a deterrent for persons of any age, but certain other problems such as reduced mobility—resulting from physical handicaps, poor health, lack of transportation, and isolation—are more likely to rule out participation for the elderly than for other age groups. These difficulties often are compounded by lifetime differences in the kinds of opportunities available to some segments of society, including minorities and women.

Dispositional or "personal" barriers appear to create special difficulties for older persons. Research indicates that they often share society's view that they are "too old to learn," and are much more likely than younger people to report that they "would feel childish" about returning to educational activities.[28] Low-income older persons are the ones who most frequently see them-

selves as too old to learn—a fact that seems generally related to their lower level of previous education. Attitudes toward education in general and dissatisfaction with what has been derived from previous educational experiences may also be important factors.

It has been suggested that some persons who identify situational barriers may be masking attitudinal barriers.[29] Lack of time or lack of money may seem more socially acceptable reasons for lack of participation than doubt about one's own learning capacities. Whatever the relationships may be among all these factors, modifying attitudinal barriers is of prime importance if education is to be provided for those who have the greatest need of it.

Older people themselves are not the only ones whose attitudes create barriers to educational activities. Equally in question are the attitudes of educators and society. Many still believe that "you can't teach an old dog new tricks." They believe classroom space should be reserved for the young in body if not in heart and mind. Older people are understandably reluctant to expose themselves to a teaching-learning situation in which they may find these negative feelings displayed by instructors or other students. Interestingly enough, some preliminary research indicates that younger faculty members may have fewer negatively oriented feelings toward older learners than do senior faculty.[30] The educating of educators about the potential of older people may eventually eliminate this particular barrier to participation. Education for educators is an important aspect of the relationship between aging and education and is dealt with more extensively later in this report.

Institutional barriers are those found in the education systems themselves. These range from overt discrimination against older persons to a long list of unplanned but detrimental and insensitive practices, which reflect a lack of awareness of older learners' strengths as well as their special needs. Evidences of this include disinterest in older students, inability to conduct programs responsive to the needs and interests of this age group, lack of sensitivity to counseling and advocacy needs, funding policies that favor career-bound younger students. In addition there are problems in finding accessible locations, in scheduling activities at convenient times, and in registration procedures.

Such barriers are undoubtedly more characteristic of traditional educational institutions and programs, with their historic orientation to education for the young, than of the nontraditional settings in which much of the educational programming for older adults occurs. At the same time, it must be recognized

that much of the progress of the past decade has grown out of the recognition of these barriers and their modification or elimination, particularly by postsecondary institutions. Such changes include tuition reduction or tuition-free arrangements, integration of older students into conventional classroom settings, and full scale educational programs designed specifically for older adults. Many institutions, having recognized barriers of time and location, have attempted to eliminate them in innovative ways. They have incorporated more sophisticated concepts of the needs and interests of older persons into their programming by utilizing the growing body of knowledge derived from gerontological research. Although the changes are by no means limited to community colleges, their leadership has been especially significant.[31]

These recent gains are encouraging, but it is important to recognize that where institutional resources are cut back, as in the present period, programs and services for older students are often the first affected.

Two caveats should also be kept in mind. First, there is evidence that for many older persons, particularly those who are poor, colleges and universities are not the preferred location for learning activities. Policies designed to expand educational opportunities must promote a balance between the efforts of postsecondary institutions and other community programs. Second, given the diversity of types of postsecondary institutions, it is not realistic to expect that each type will place the same emphasis on educational programming for older adults. Research institutions, for example, may make their greatest contribution by developing new knowledge about education and aging rather than by developing new instructional programs for older people.

One institutional barrier that deserves special comment is the lack of information and counseling about educational opportunities. Older persons need information about formal and informal programs that can help them achieve their educational goals—information about where programs are located, what they offer, how to gain access to them, and alternative ways of achieving goals. This kind of knowledge is related to one's earlier education; many older persons with limited educational backgrounds do not have such knowledge and do not know where to find it. Surveys reveal that a high percentage of potential adult learners would like more information about opportunities for education. Consequently a basic challenge for educators in this next decade is to gather information on educational programs, keep it current, and make it available to all interested older adults.

Ample evidence that imaginative programs can surmount institutional barriers, and that older learners will then be eager to enroll, can be found in the phenomenal growth of the Elderhostel movement and in other campus-based programs for retirees. As indicated earlier, however, most programs attract the relatively well educated; our institutions have much to learn about how to serve the urgent educational needs of less advantaged older people.

Older Persons as a Resource for Education

An important aspect of lifelong learning is that it can provide opportunities for older persons as teachers and counselors, not just as students. Indeed, many roles in educational programs for all age groups can be filled by older persons.

Delegates to previous White House Conferences on Aging called for an expansion of employment and volunteer service opportunities for older people. More recently, the National Committee on Careers for Older Americans has reiterated the call and focused attention on the 1974 Harris Survey findings that among the nonworking population aged 65 and over, four million persons said they wanted to work and another 2.1 million expressed interest in volunteer service.[32] In its recommendations, the Committee drew attention not only to how educational institutions can prepare older people for new work and volunteer roles but also to the variety of new roles in education itself.[33]

Although we lack adequate data on older persons as paid or volunteer teachers or in other roles as educators, there are enough examples of their involvement to suggest that the number is significant. In federal programs such as VISTA and RSVP, in various kinds of educational institutions, and in other settings, the use of older volunteers and retired persons as teachers of the young and as teachers of other older persons has expanded as dramatically in the past decade as the number of programs for older adults. A recent study offers some evidence of what has been accomplished. Again using Harris Survey data, it estimates that as many as 20 percent of all older volunteers "are involved in work that is broadly educational," although fewer than half of them are in actual school-related roles. The authors of *Never Too Old to Teach* estimate that at least one million older Americans are in education-related roles in settings ranging from elementary and secondary schools and postsecondary institutions through community agencies and churches to corporations.[34] If this figure is correct, it is possible that more older Americans

are engaged in education, broadly considered, as educators than as learners. Among the more than 3,000 institutions responding to the Academy for Educational Development (AED) survey, the involvement of a small number of older persons as educators was persistently reported as "the rule rather than the exception," and the roles older people played included teacher, tutor, group leader, teaching aide, library aide, career advisor, librarian, counselor, administrator, creator of educational games and teaching aids, researcher, tour guide or docent, and others. In more than 85 percent of the cases reported to AED, the services of these older persons were rated "excellent" or "very good."

Clearly, education has begun to realize the potential of older Americans as educators. There is a new awareness that they serve a unique role in transmitting a heritage of values, knowledge, and skills. Yet despite many encouraging examples involving low-income older persons and older persons of limited skills, older volunteers, like most adult volunteers, are drawn primarily from among those whose income and education are above average. Older persons having low income and limited skills often lack experience as volunteers and so are less likely to express interest in such activities. Involving them in educational roles represents a special challenge, and may require payment for their services. Such programs as Senior Aides and Foster Grandparents demonstrate that this challenge can be met. It is particularly unfortunate that the number of positions available through such programs has increased very little in recent years.

Our society urgently needs the contributions older people are uniquely qualified to make through teaching and sharing roles in nursing homes, churches, schools, on television, and in many other aspects of community life.

Financial Support of Education for Older Persons

For most Americans, education is a cherished value inextricably related to the nature of a democratic society. In practice, however, it has been seen primarily in terms of providing the young with the basic skills necessary to enter the work force and to function in society. Funding policies at national, state, and local levels do not yet reflect the responsibility of society for ensuring educational opportunities for all citizens. Public and private resources for the support of education have been directed primarily to the establishment and maintenance of programs for children and youth, including those of the traditional college ages. Much of the limited support available for adult education

is conceived in the same terms: to provide for basic skills or for job-related training. Thus, education has not been given high priority among services for older adults. Although the 1973 Amendments to the Older Americans Act referred to making available "comprehensive programs which include a full range of health, education, and social services to our older citizens,"[35] the Declaration of Objectives for Older Americans found in the 1978 Amendments to the Older Americans Act includes no specific reference to education. Under the 1978 Amendments, continuing education and preretirement and career counseling are included without priority as social services that may be provided by State and Area Agencies on Aging.

That Act is only one of many Federal programs under which support of education is possible. The nation's most explicit commitment to lifelong learning is contained in Title I of the Higher Education Act. The 1980 amendments to that Act establish a Commission on National Development in Postsecondary Education. One of its responsibilities is to evaluate the extent to which age is a barrier to participation in postsecondary education for persons age 60 and older. This development could be of considerable significance to older Americans.

Many programs that provide support for the education of older adults already exist. A study published in 1978 estimates that no less than 270 Federal programs scattered through numerous cabinet level agencies with expenditures of $14 billion can be said to provide support for lifelong learning, broadly conceived.[36] Among the agencies most involved in addition to the Department of Education are the Department of Health and Human Services, the Department of Labor, the Department of Agriculture and the Veterans Administration. There is no estimate of the extent to which these programs provide support for education for older persons, but it is clear that—just as funding for all adult education is meager compared to that for educating children and youth—the dollars allocated to programs for the elderly are an exceedingly small fraction of the $14 billion. One reason is that many of the programs included, such as vocational rehabilitation and comprehensive employment training, are job-oriented and have notoriously poor records of serving older persons. Others are devoted to student support in formal academic programs under specific eligibility requirements defined by law which effectively minimize their use by older persons. Finally, very few provide support for the kinds of informal programs that are of major importance in providing educational opportunities for older citizens.

This situation is demonstrated by the 1981 appropriations for Department of Education programs of potential importance for the education of older persons. Under the continuing resolution signed into law on December 16, 1980, these are as follows: Continuing Education programs for educationally disadvantaged adults, $9 million; Educational Information Centers, $3 million; Postsecondary Education Commissions for statewide planning and coordination of education for adults, $3 million; Adult Education, $120 million; Community Schools, $10 million; Fund for Improvement of Postsecondary Education, $13.5 million; Libraries and Learning Resources, $263.6 million. The U.S. Senate Special Committee on Aging *Memorandum*, from which these figures are taken, points out that 1981 funding for these programs is essentially at 1980 levels except for increases in the amounts appropriated for adult education and especially for community schools.[37]

Like Federal expenditures, State and local support for older adult education cannot be estimated, but in terms of appropriations it is believed to be minuscule.[38] States are active, of course, in the administration of several programs that are Federally funded, such as Title III of the Older Americans Act, Adult Basic Education, and Title I of the Higher Education Act. Undoubtedly State resources are important to the activities that institutions of higher education, particularly community colleges, have carried on, and a number of states have adopted tuition waiver policies to encourage the participation of older persons in higher education. It is doubtful, however, that any significant number of older persons have made use of these fee waivers. In general, the same comments apply to local governments where, as with State governments, financial support of education usually means support of schools and programs for children and youth.

It has been estimated that business and industry invest as much as $2 billion annually in training and education for employees.[39] Significant sums are also spent by trade unions, but again it is doubtful that in either case much of the expenditure is on behalf of education for older adults, except possibly in the area of retirement preparation.

The need for new funding approaches to support the wide range of programs necessary now and in the future is a concern for all those involved in education for older adults, whether in community agencies, national organizations, public school adult education programs, or colleges and universities. Among options suggested for action at the federal level are tax relief, entitlement plans, and special incentives for institutions and employers.

To date, tax relief, in the form of credits or deductions, has been advocated primarily by those concerned about the burden of educational expenses for younger students and their parents; the risk of age discrimination in such plans has not been widely discussed. Under entitlement, public funds help finance education for individuals affiliated with a specified group, such as veterans of military service. In recent years there have been several entitlement proposals related to adult continuing education. Institutional incentive plans would provide funding directly to institutions that develop lifelong learning programs, while private sector incentives would encourage corporations to offer their employees paid educational leaves or tuition reimbursement.

In his background paper on education for the 1971 White House Conference on Aging, Howard McClusky commented that "any thoroughly candid appraisal of the present situation must come to grips with the hard fact that education for aging is an orphan living in the attic of the home of the stepchild (adult education) of the educational and gerontological establishments."[40] Despite the progress of the past decade, McClusky's appraisal is still accurate. The full integration of older persons into lifelong learning remains an agenda for the future.

IV. EDUCATION FOR PERSONNEL SERVING THE ELDERLY

Education contributes both directly and indirectly to the quality of life for older Americans. One significant way in which educational activities help to achieve this goal is by assisting personnel who work with older people, or on their behalf, to be knowledgeable about the nature of aging, to be sensitive to the needs of older Americans, and to respect the uniqueness, heterogeneity, contributions, and potential of the older population.

Such education needs to be available for persons already providing services to older Americans as well as for those preparing for the many careers that involve work with the aged. Despite the importance of gerontological education for all kinds of practitioners who serve the elderly, it is difficult to design specific programs to ensure that the need is met. The issue is complicated by the fact that those who serve older people are drawn from many professions, disciplines, and occupational groups, most of which control their own educational standards and requirements. In other instances (e.g., governmental personnel responsible for planning and delivering services for the elderly), there are likely to be only broad educational requirements that do not specify gerontological training.

The issue for aging, however, is not that nurses must satisfy one set of requirements and social workers another, or that physicians must meet a different set of standards from those for dentists, pharmacists, or nutritionists, but whether and how there can be assurance that the requirements and standards for their professional education will include a core of gerontological knowledge that will enable them to serve the increasing older population.

Services provided by practitioners of any type who are inadequately trained in aging can be ineffective and wasteful, either because of lack of specific gerontological knowledge or through failure to recognize an older person's potential. Programs based on stereotypes about older Americans can create dependencies detrimental to clients. Education about aging is needed to prepare those whose work brings them regularly into contact with the elderly, whether they are in the "classic professions" such as medicine and law, or in poorly rewarded, day-to-day roles such as aides who care for the chronically ill elderly in nursing homes. Training programs will necessarily differ in objectives, in their utilization of a conceptual base of knowledge, in duration, and in instructional method. No matter how great these differences, they must share a common thread. Education should impart a knowledge about aging and the service skills that will enable practitioners to best perform the services for which they are responsible. It should also prepare them to educate—that is, to make the most of the many opportunities for sharing knowledge that arise as services are provided to older people.

The necessary education for those who work with older people encompasses a wide range of activities utilizing a variety of settings, under a variety of auspices, and serving a variety of functions. Because there is a constantly changing body of knowledge concerning aging, personnel working with older people need to maintain an ongoing relationship with educational systems, returning to them at regular intervals for new knowledge and updated skills. Thus such educating activities need to be lifelong in nature.

Higher education plays a special role in this process for many reasons. Through its emphasis on research, higher education is the major source of new knowledge about aging and about policy issues. It has the primary responsibility for preparing professionals to work with older persons and conduct research on their behalf. It also bears responsibility for preparing those who will teach and supervise service providers whose job skills do not require degree training. Because these responsibilities in relation to aging are relatively new to higher education, the best means of meeting them are still the subject of wide discussion and debate.

The Current Situation

Education about aging has existed for many years in a small number of institutions of higher education, but as Birren, Gribben, and Woodruff noted in the background paper on training for the 1971 White House Conference on Aging, "The main feature about training and education on problems of aging is that there is so little of it."[41] Since that conference, many of its recommendations (e.g., the establishment of centers on aging) have been implemented, and an increase in academic programs about aging has occurred at all levels of education.

Prior to 1970 there were very few gerontology programs in higher education, and most of them were at the graduate level. These programs were usually located in social science disciplines or professional schools, with the exception of the health professions. Baccalaureate degrees in gerontology and undergraduate courses were rare. In the 1970's gerontology was undoubtedly one of the fastest growing areas of study within higher education. Although a period of federal support contributed to the development of many programs, for the most part the growth was the response of higher education institutions of all types—community colleges, four-year colleges, and universities—to their perception of an emerging need. Seminars, workshops, and special training institutes also proliferated, on campuses and off. Today opportunity in some form for learning how to work with or on behalf of the aging is available in many settings. The quantity of educational programs in gerontology is no longer the major question. The educational issue for the 80's and future decades centers on the quality of these programs and the degree to which they meet the objective of providing appropriate knowledge and skills about aging. At the same time, educators must address the urgent need for introducing content about aging into the instruction provided in many additional fields.

Concern for the integrity of training programs in gerontology and the legitimacy and professionalism of academic gerontology led to the recent national study reported in *Foundations for Gerontological Education.*[42] This document focuses on three specific areas: (1) components of a basic core of knowledge essential for all people working in the field of aging; (2) knowledge essential for clusters of professions related to the biomedical sciences, human services, and social and physical environment; and (3) knowledge essential for four professional fields—clinical psychology, nursing, nutrition, and social work. As the first resource of this kind available to educators for planning and evaluating curricula in aging, the study addresses some of the dilemmas that face those who are committed to excellence in gerontological training. Educators

continue to be torn between the forces recommending "how to think" programs and the forces recommending "how to do" programs. The length and cost of educational programs that attempt to integrate these two viewpoints often make them impractical. In non-educational circles, a different conflict poses even more difficulties. If gerontology programs are to attract able students and turn out qualified professionals to serve the aged, they cannot ignore the schism implicit in the inconsistency of hiring policies in the field: Many people believe that age itself, or at least an empathy for the elderly, is often adequate qualification for working with older Americans. Others contend that there is a body of essential knowledge obtainable through formal training in gerontology that contributes significantly to one's competence as a service provider, planner, researcher, or administrator. And if training is deemed essential or desirable, the question remains: Should it be tailored to specific roles in the aging services, or must it provide a broad base of gerontological knowledge?

The viewpoint of the approximately one hundred leaders who participated as respondents in the Foundations study is clear: They see gerontology as a distinct field of study and practice with specifiable—though not yet fully specified—content and boundaries. They consider a common body of knowledge to be an important component of career preparation for anyone who plans to work with or on behalf of the aging.

Educators emphasize the importance of such topics as the psychology and biology of aging for all who work with the elderly. They point out, for example, that an understanding of how the aging mind processes information enables the educator to devise appropriate instructional methods; it permits the physician and pharmacist to convey prescription instructions in understandable ways; it improves communication between the service provider and his or her older clients. Similarly, a perception of what constitutes normal biological aging helps any practitioner—whether in health care or some other field—to contribute to a supportive environment, and to be alert to symptoms that suggest which interventions should be considered at a given point in time.

In the past, nearly all those who worked with elderly people focused on the problems of aging. Their views were influenced by stereotypical information and by early research undertaken largely with institutionalized older people. Many practitioners saw only older people with difficulties and assumed all older people had similar problems. As the quality and quantity of research have improved, we have better identified the processes of normal aging and begun to understand the difference between the consequences of aging and

the consequences of other forces such as societal conditions and reactions to the aged. In every area of research undertaken to date—from the effectiveness of service programs to cognitive functioning—discoveries illustrate that much of what was thought to be factual is not supported by scientific data, and much that was considered inevitable is avoidable. While these research findings are having an impact on the attitudes of many service providers, other providers continue to make denigrating assumptions that ignore the competencies of older people. These negative perceptions indicate the need for including direct experience with older people in training at inservice and preparatory levels.

Aims and Future Needs

Educational programs should sensitize those who provide services to older Americans so that they can fully recognize the potential of the aged and build on their capabilities. In all kinds of settings, both formal and informal—in educational institutions, social service agencies, hospitals, nursing homes and at home—those who serve older people need to take into account that there is more to life than merely remaining alive; that the goals of working with older people are to enhance their potential, build on their capabilities, and enable them to do for themselves rather than have others do for them. This goal is not likely to be achieved until and unless we have an adequate cadre of individuals educated to teach both about the aging processes and about society's impact on the aged. Without such educators, the call for more and better educational programs can be no more than pious platitudes. Carefully planned programs are needed to prepare those who will be teachers at all levels of our educational system and in informal kinds of educational endeavors.

A number of good academic programs in gerontology at both large and small institutions of higher education constitute a rich resource for these educators. As yet, however, it is characteristic of many who teach about aging at the post-secondary level—and probably of a majority of those who offer age-related instruction in other kinds of teaching situations—that their formal training in gerontology is limited if not non-existent. Although a genuine commitment to aging may have led them to read extensively or enroll for short-term instruction, they often lack a thorough grounding in the complex and interrelated factors that affect life in the later years. However well-intentioned, such teachers are often ill-equipped to give their students a realistic understanding of what aging is, in keeping with up-to-date research knowledge and broad experience. Unless instructors have comprehensive knowledge, education about

aging may merely perpetuate erroneous concepts. Considered within the context of the Foundation's report, education for teaching about aging is an essential component of the effort to assure that personnel needs will be met and new research knowledge will be generated.

There are differing opinions as to how content about aging should be introduced into the curricula of educational programs. For example, an assumption of many medical school administrators has been that there is no body of medical knowledge and practice unique to the care and treatment of older people. They contend that medical education provides a knowledge base that is sufficiently broad to enable physicians to practice medicine effectively with older as well as younger people. Similar arguments have been advanced in such other professions as dentistry, pharmacy, social work, clinical psychology, and nursing. An increasing number of professionals, practitioners, and educators differ with this approach, however, contending that there are unique aspects to working with older people and that knowledge about aging is essential.

There is now a growing recognition of the special importance of educating health professionals to serve the needs of an increasing elderly population, recognizing that one-third of the nation's health expenditure is for older persons. Numerous efforts have been made in the past decade to develop educational opportunities in gerontology for health professions training, but these have been fragmented and of variable quality. Various inadequacies have been cited. Educational resources are insufficient to produce the needed geriatrically trained personnel to service the health needs of the projected elderly population.[43] There are substantial institutional barriers to adopting and supporting a geriatric curriculum, and inadequate institutional commitment and resources.[44,45] Faculty and students have negative attitudes about the aged and aging.[46] These impediments are seen in varying degrees in all the health professions, and they raise issues that extend beyond the initial training period into professional certification and continuing education efforts.[47]

One problem inherent in education for personnel serving the aging is that needed information about older people often is not readily accessible. Because of the rigidity of disciplinary boundaries, sociologists, for example, have knowledge about aging that physicians are unlikely to learn in their professional training. Bodies of knowledge about aging tend to be oriented to single professions or disciplines. While the study of aging may require multidisciplinary perspectives, this is not the typical approach of educational systems and professions. Consequently the existing knowledge base is fragmented.

This fragmentation points up the important function of gerontological libraries in which information about aging is pulled together from many kinds of sources. These libraries need continuing recognition and increasing support of their critical role as information resources in gerontological research, education, and training.

Difficulties in identifying and obtaining the necessary knowledge for gerontological education are complicated by the fact that services for the elderly are also fragmented. The older person is one entity but the programs that serve him or her are many entities. Older people may be underserved in some areas of their lives and overserved in others. A major issue is whether the scattered knowledge base and skills needed by practitioners can be pulled together in such a way that the study of aging can be viewed as an entity. The steadfast maintenance of disciplinary lines and service models has contributed to proliferation of less than fully productive programs and services for older Americans. Educational programs for personnel to work with older people will need the increased support of governmental organizations, if there is to be a change for the better.

In viewing training and educational needs, it is important to recognize that the situation of older people, and consequently their needs for and access to services, are also constantly changing. Future legislation related to Social Security, Medicare, age discrimination in employment, or national health insurance could suddenly change the economic and social circumstances of older people and therefore their problems and needs. Service providers must be constantly alert to legislative and policy changes. Such knowledge needs to be communicated in workshops and meetings at the working site of practitioners as well as in the more formal classroom settings of pre-professional and professional academic programs. Corollary needs also become evident as we consider the growing knowledge base and the changing situation of older adults. One need is for education that prepares service providers, teachers, and researchers who are flexible enough to keep abreast of the times. Another is for an educative dimension in the service provider's role. Updated information needs to reach the older client as well as the practitioner; and service delivery offers an important opportunity for sharing new knowledge as well as basic information on health care, legal rights, consumer pointers, and many other topics.

Because many of the career preparation programs in higher education have been federally financed through the Older Americans Act, they have been strongly influenced in shape and content by changes in the Act and by Ad-

ministration on Aging policies. These education and training activities were originally funded under the old Title V of the amended Act, with funds provided to help colleges and universities develop programs and encourage students to enter the field of aging. While AoA continues to be concerned about the development of innovative instructional materials, assistance to students, the development of linkages between research and service through training, the establishment of programs in colleges and universities, and the upgrading of skills of those already in careers tied with Older Americans Act services, there have been significant changes in AoA educational support programs in recent years. Increased emphasis has been placed upon linkages between academic programs and personnel studies, and on a shift to a more specific career training rather than the education of generalists in the field of aging. Related kinds of professional training programs, such as medicine, are subject to the impact of policy shifts in other funding agencies. Consequently, the orderly development of gerontology as a field of study has been somewhat impaired.

Personnel Requirements

The development of educational and training programs cannot be based on current personnel needs alone. The projection of future needs for aging-trained personnel is essential for two reasons: First, current needs do not always predict future ones. By the time many have completed their education programs, personnel needs may well have changed. One factor is that hiring policies of many organizations are related less to education and training requirements and more to professional requirements (exclusive of aging), what is being funded, and what is politically popular than to systematic educational development. Second, those who insist on relating education and training programs to current personnel needs in aging are focusing primarily on the personnel needs of aging-specific agencies. To develop accurate projections of the need for educators, researchers, and practitioners across the nation will require a series of studies much broader and more detailed than currently exist.

There is an inappropriate fit between existing manpower and the needs of the elderly. The problems are that (1) we do not really know what manpower needs exist because the needs of the elderly have not been examined in a way that identifies the full configuration of necessary service roles; and (2) without up-to-date data concerning manpower needs conceptualized from the point of view of the population to be served, there is no way to gear education and training programs appropriately to meet these needs.

Previous studies have looked at future personnel needs in terms of traditionally defined roles, and therefore have limited value for determining how many practitioners, and what kinds, will be needed in the future to serve the multiple and complex needs of the elderly. Because these needs cut across disciplinary and professional lines, research and training in aging require multidisciplinary and interdisciplinary efforts of a magnitude not characteristic of other areas and may require new career lines.

The 1978 amendments to the Older Americans Act call for the Administration on Aging to report to Congress on manpower needs in aging every two years. AoA's efforts in this area have been limited by all the factors noted above, thus the need remains for serious attention to developing manpower projections.

Even with the lack of adequate data, we know the need for personnel is serious. One of the areas in which the need is particularly urgent is health care. For example, recent projections developed by Rand (on the assumption that geriatricians should provide both consultant and primary care to people aged 75 years and older, and that they should delegate a moderate amount of responsibility to nurse practitioners, physician assistants, and social workers) concluded that the United States will require 7,000 to 10,300 geriatrically trained physicians by the year 1990.[48] Further, the report of the 1981 WHCoA Technical Committee on Health Services substantiates the need for the gerontological education of large numbers of doctors, nurses, pharmacists, and physical therapists, among others. This report emphasizes the need for redirection and redistribution of current health personnel into geriatrics, rather than increased enrollments in the health professions schools. This emphasis complements a 1980 report to the Secretary of Health and Human Services that there will be a serious oversupply of more than 140,000 physicians by the year 2000 if medical schools continue to train doctors at the present rate.[49]

Demand for manpower in aging services, as in mental health services and children's services, is to a considerable extent a function of public policy.[50] Thousands of new positions can be created almost instantaneously, for example, by a requirement that nursing homes have activities directors or social work consultants or adequate ratios of registered nurses and licensed vocational nurses to patients.

The impact of public policy on personnel requirements has many ramifications. Policy decisions seem not to take into account the lead time necessary to produce trained personnel. The result, which is familiar, is a flow of less

well trained persons into the vacuum, followed by the demand for short-term training. Even if the number of positions involving direct or indirect work with older people could be predicted with reasonable accuracy, questions remain about what gerontological content should be incorporated into professional and paraprofessional curricula, and how. Serious attention needs to be given not only to personnel issues, but also to identification of specific knowledge and skills needed for work with older people. Moreover, given the demand for training of personnel, a serious question arises in regard to the adequacy of the supply of educators qualified to provide such training.

V. EDUCATION ABOUT AGING AND THE AGING SOCIETY

As individuals and as a society, Americans have not yet come to grips with the startling population shift of this century—the tremendous increase in the number and percentage of older persons. Younger Americans may become aware of one dimension of the change when it affects them personally, as when Social Security taxes are increased or an elderly parent needs special care, but for most people, growing old is still something that happens to others. Stereotypes substitute for knowledge; the aged are viewed as a burden by society and even by themselves, and aging is a fate to be feared.

In this situation, the urgency of the demand for educational opportunities for older persons and training for practitioners cannot be permitted to overshadow a broader concern: the need for educational programs to provide every American, throughout the life span, with knowledge about aging. This knowledge must include information about the processes of aging, the potential as well as the problems created by changes in the latter part of the life cycle, the impact of the changing age structure on our social institutions, and the social forces that impinge upon the processes of aging. While aging may be experienced individually, many of the problems and concerns experienced by older people are societal in origin.

The Need for Education About Aging

Just as older people need knowledge about aging in order to cope with the experience of aging, persons at other stages of life need it in order to develop healthy attitudes about their own aging and to better appreciate and interact with the older people about them.

Older adults live their lives in communities, and in those communities are many others of all ages who interact with them and whose behavior affects their well-being. The number who have job-related contacts with the elderly is limitless; it includes store clerks, receptionists, police officers, clergy, mailmen, bus drivers, public officials, media personnel, and staffs in many kinds of offices, businesses, and community agencies. Policy makers and program planners at national and local levels also play a part in the lives of the elderly as they plan services and activities intended to span age groups. While the importance of gerontological knowledge for such professionals as health care providers, educators, and social workers employed in aging related agencies is increasingly recognized and has already been noted, little is said about the many others who could better interact with the elderly if they had some knowledge of aging and the aged. A beginning is being made, however.

Obviously information about aging and the aged is already being transmitted for a number of reasons, and through a variety of mechanisms. The transfer and spread of this kind of information takes place in formal and informal settings; it is caught as well as taught. It is communicated through the media, in children's books, in movies, and through jokes. Some of it is valid; some of it perpetuates long-held misconceptions.

If accurate information about aging is to reach so diverse an audience as the American public, it must be presented under many auspices and in many forms. Certainly efforts to convey information must be adapted to the changing needs of individuals and groups of individuals in different periods of the life cycle. For young children, the primary focus may be on providing positive role models, while for adults—including older adults—it can also incorporate discussion of intergenerational relationships, of public policy issues as these affect and are affected by the aged, and above all, an understanding of the unfolding processes of aging within one's self. Education about aging involves sensitizing—making the learner aware of the normal as well as the problem aspects of aging in order to relate better to older people and to his or her own eventually aging.

Delegates to the 1971 White House Conference on Aging were aware of the need for education of this wide-ranging kind when they recommended that material about all aspects of aging be introduced at all levels of the formal educational system, that positive concepts about aging and older persons be incorporated into teacher training, and that the mass media promote a better understanding of the aging.[51] The intervening decade has brought a number of encouraging developments in each of these areas and related ones.

Current Education About Aging

Education about aging is beginning to take place in many settings and through many channels.

In the long range—as the 1971 delegates recognized—one of the most effective ways of transmitting knowledge to the total population is to incorporate it into the learning programs of the nation's elementary and secondary schools. Many public and private schools are now actively exploring ways to help their pupils view aging as a normal life experience—often by using older people in the classroom to interpret and exemplify aging at its true potential. Programs such as that of McGuffey School in Oxford, Ohio, provide a model for education about aging in the primary and middle grades. During a project in this school, the topic of aging served as the focus of all subjects in the curriculum including the fine arts. Students in biology courses dealt with the biological aspects of aging while those in social studies courses considered a variety of topics from retirement to the family life of older people. Older people in the community joined the students at mealtime.[52]

Another model for mixing the over-60s and the under-16s in an elementary public school setting was developed first in Ann Arbor, Michigan, and has since been adapted to learning situations in many locations. In the Teaching-Learning Communities (T-LC), "grandpersons" and pupils work together throughout the school year on art projects ranging from old-world crafts to filmmaking, and share their interests in story telling, music, gardening, and other activities. Research has established the learning benefits of the T-LC environment, and the project's developers have served as a resource for programs in all 50 states and seven countries.

As yet, education about aging for elementary and secondary school students is scattered and largely experimental. There is need for much further development.

In higher education, similarly, curriculum materials on aging for use in teacher training have been developed, and workshops for teachers have been conducted in a few locations, but much remains to be done. Perhaps more important, instruction in gerontology is now firmly established in hundreds of institutions, including community colleges and baccalaureate and graduate level institutions, not only for career and professional training but as part of the curricula for general education. A decade ago the availability of texts and audio-visual materials to support instruction about aging was limited; today excellent texts, reference works, and audio-visual materials are becoming available.

Developments in formal education, however successful, respond to only a small portion of the need for education about aging. Progress is also being made outside of educational institutions.

In many cases the experience gained through programs such as those already described is summarized in written or audio-visual materials that are shared with, and utilized by, providers of informal education as well as other universities and colleges. Also coming out of institutional experience and research have been various exercises and training tools that simulate part of the experience of being old, so that younger people can better understand the perceptions and thinking of those who are already elderly.

A number of religious denominations have developed materials about aging, and are using them in youth groups, adult organizations, instructional programs, and worship services. Similarly, several national youth groups and community service clubs have begun to provide their members with information about the situation of older people.

In society at large, the "discovery of old folks" by the print and electronic media—where the elderly are at last beginning to be seen not as stereotypes but as real people—is having a positive and measurable impact. The report of the Technical Committee on the Media discusses in more detail this powerful means for conveying more accurate information and positive attitudes to the public. Worthy of special note here because of its educational dimension is the project in Reading, Pennsylvania, where older people in housing projects and senior centers produce informative programs for each other via cable television. Because interactive capabilities of the system are utilized, viewers who wish to participate from their own apartments can be seen and heard along with those in the studio. In other locations, radio and television programs geared to the interests of retirees are providing education along with entertainment. A few ongoing programs on the airwaves help to give the public up-to-date information about aging and older people. An increasing number of syndicated and local columnists are focusing on aging and sharing knowledge with sizable readerships of all ages.

Tomorrow's technologies will undoubtedly provide other exciting ways of reaching this goal. But there is no need to wait; the educational possibilities of existing communications capabilities—video discs, closed-circuit radio and TV, computer networks, satellite communications, interactive cable systems—are only beginning to be tapped. Their potential for education, both organized and informal, is limited only by our imagination. For example,

cable television, which now reaches many small communities as well as the nation's metropolitan areas, has limitless possibilities for local programming in which older persons participate as producers, writers, or performers to help educate their communities. Its interactive aspects, if fully utilized, can offer the homebound opportunities to be communicators as well as recipients of information.

These ways of utilizing technology are of particular interest to the field of aging because they involve older people directly with their communities, escaping the "lonely learning" that adds to the isolation many of them already experience. There is particular promise in the possibilities for combining familiar modes of communication—television, newspapers, and telephone, for example—in educational programs to foster two-way communication.

Challenges for the Future

The expansion over the past decade of education about aging—in a diversity of settings for a diversity of purposes—is gratifying, but like the expansion of educational opportunities for older adults and training for services to the elderly, it must be kept in perspective. Measured against the past, the progress we have made is undeniable; measured against the need, it is a partial step.

Despite the examples of successful elementary and secondary school programs, there is no broad consensus about the inclusion of gerontological content on aging in school curricula; despite some fine programs that train teachers to teach about aging, there is no general commitment to the inclusion of such training in teacher education. Despite the success of individual community programs, there is little support for their systematic expansion throughout and across systems.

Our efforts in the direction of providing education about aging are still in their infancy. We know something about what needs to be accomplished and we know why it needs to be accomplished. At the same time, however, we are still trying to discover the most effective ways of achieving our goal—providing some form of education about aging to everyone who lives in our society. If this goal were ever to be achieved, we would be on the threshold of a truly age-integrated society, and all Americans would be better prepared to face their own eventual aging with equanimity and understanding. Ageism and age-discriminatory behavior could be eliminated if people in all walks of life had access to knowledge about aging.

The new momentum in growth of public interest in aging poses risks. As commercial producers, publishers, and others in profit-motivated organizations respond to the population shift by using age as their theme, those who have an institutional or personal commitment to the well-being of older Americans must be concerned about the validity of the information conveyed. Scientific knowledge developed through research must be transmitted to those who help shape public perceptions. It is encouraging that many media representatives have already responded positively to efforts to acquaint them with current information about aging.

The risks inherent in expanding interest in aging are not limited to the commercial sector. As public and private services and programs are changed to fit population trends, the helping stance that typifies many worthy organizations may lead to an emphasis on the problems of the elderly, without a balancing view of their strengths. Professionals called in to tell service clubs or youth groups about aging are likely to be those whose contacts are with the frail and atypical elderly. These factors can serve to perpetuate misconceptions about aging instead of correct them.

Both the encouragement and the monitoring of public education about aging are therefore important responsibilities for those who would work toward an improved quality of life for older Americans. Agencies in the federal aging network have been assigned a share of this task, but in the press of other demands on time and resources, public education frequently has a low priority. Gerontology centers in colleges and universities regularly share research findings and other information through conferences, publications, and other channels, but typically reach a specialized and limited audience. At least a few national organizations of older persons serve a watchdog function, protesting negative stereotyping in the media, in governmental policies, or wherever it exists, but so far their success is limited when measured against the national need. There must be new channels to convey today's knowledge about aging and the aged to all those who help "educate" the public.

At the same time, we also need a much more systematic knowledge base for strengthening education about aging. We need models of successful programs, and we need to understand why they are successful. We need to understand the sources of uninterest, apathy, and resistance which are barriers to education about aging both within and beyond the formal educational system. We need to be able to create linkages and feedback mechanisms among research, the training of teachers, and students in all educational systems which will ensure not only that methods of instruction are effective but also that the content conveys our best knowledge of the aging processes and is appropriate to the age group for which it is intended.

Ultimately, as Howard McClusky has argued, we need to recognize the importance of a life span approach as an "integrative standard" for education.

> Several outcomes would result from an implementation of this standard. It would mean that education for and about aging would begin in the elementary school and continue throughout life. It would emphasize the importance of childhood and youth education in laying a foundation for successful living in the later years. It would provide valid and feasible criteria for determining priorities in curriculum development. To be more generic, it would make use of the "spiral curriculum" in timing of instruction. Ideas, themes, and facts of supreme importance for life in the middle and later years would be introduced early in a student's educational career and reintroduced at successive levels of maturity appropriate for his or her developmental stage. To illustrate: since good health is perhaps the most important requirement for productivity and the enjoyment of life in the middle and later years, instruction aimed at producing good health in childhood, youth, and the years thereafter would become an extremely important aspect of any program of instruction.
>
> In brief, we are proposing that a life span approach to aging means that life in the middle and later years, at its culminating best, should serve as a guide for education in all the years and stages of development leading thereto.[53]

The achievement of Dr. McClusky's integrative standard would certainly point the way to a better informed and more caring age-integrated society.

VI. SUMMARY OF SIGNIFICANT ISSUES

Three broad topics have been considered in this report: (1) education for (and by) the older adult; (2) education to prepare personnel to work with and on behalf of the aging; and (3) education about aging for all persons in American society. Throughout, it has been emphasized that all educational efforts must be based upon sound knowledge about the processes of aging and about the impact of society on these processes and on the aging individual.

Each section has also emphasized the progress made since the 1971 White House Conference on Aging. Attention has been directed to the increase in lifelong educational opportunities, and to the increasing number of older persons who are providers of education. There has also been a focus on the range

of programs designed to prepare students to work with older people or to enhance the knowledge and skills of those who do, and on the variety of emerging efforts to increase public awareness and knowledge.

These developments are gratifying. Yet it must be re-emphasized that much remains to be accomplished. Only a small percentage of the aged enroll for formal educational activities, and for the most part they are relatively advantaged persons. Given the projected increase in the older population, many thousands more could take part in educational programs without significantly raising that small overall percentage. To merely extend the scale of present efforts would have little impact on the educational needs of older people whose level of educational attainment is low, who are members of minority groups, who are physically handicapped, and who are poor. The notable expansion in recent years of educational programs to prepare personnel to provide services for the aged, teach aging courses, and conduct aging research, has not yet led to commonly accepted standards for such programs. Nor have we achieved consensus about their content and sponsorship. Similarly, we have as yet no unified approach to education about aging.

Possibly the most important consideration about the progress of the past decade is that it reflects the evolution and improvement of a knowledge base from which to move ahead, a knowledge base which has made successes possible in each of the three areas, but has also provided some measure of the job ahead and the barriers to be surmounted.

Issues in each area are outlined in this section along with broader issues, such as research, that cut across all aspects of education and aging. The list is not all-inclusive. Rather, the Technical Committee on Education has endeavored to highlight a limited number of issues for consideration by the delegates. Other issues may well emerge from Conference discussion. It is obvious that no set of issues can be fully definitive in a changing society.

Underlying all the issues is the Committee's conviction that education must have a high priority—not simply as an end in itself but because it is essential to the achievement of other Conference goals. The decades ahead will require advances in lifelong learning, in the education of persons to work with the elderly, and in education about aging as societal needs change and are better understood and defined. Before the potential of education can be fully realized, basic changes must occur in our attitudes toward the potential of education for older adults, toward society's responsibilities for the support of education, and in the priority we assign to it. All this will not be realized without struggle, and older persons themselves must have leadership roles in the struggle. The issues below are a starting point.

A. Issues related to expanding education opportunities for older adults:

1. What programs should have highest priority in use of public funds, recognizing that resources will be limited in relation to the need?

The diversity and complexity of needs among older people require educational programs of many types. Programs responsive to needs of specific groups of older persons range from instruction for basic literacy and other coping skills to courses in the humanities and arts; from job-oriented training to education for leisure and self-actualization. Clearly there is a need both for categorical funding to ensure the availability of specific kinds of programs, and for less restrictive funding to enable organizations engaged in the education of older persons to set priorities in terms of their prospective students' interests and needs. Yet resources will continue to be limited, necessitating the establishment of priorities. What kinds of programs are the most essential, and for what group or groups of older adults—e.g., the educationally disadvantaged, minorities, women?

2. What can be done to ensure that a fair share of federal funds is available for the education of older persons?

Categorical funding programs at the Federal level include, among other programs, adult basic education, job training, community schools, educational information services, and programs for the educationally disadvantaged. Those who are cognizant of the needs of the elderly are concerned about the small proportion of such funds available for older learners. Corollary questions are how to determine what constitutes a "fair share," and how it might vary from one type of program to another.

3. How can the support of adult education by State and local governments be increased, and through what mechanisms can we assure a fair share of the increase for the education of older adults?

At issue is the extent to which State and local governments should assure a larger part of the cost of expanding educational opportunities for adults in general and for older persons in particular. In addition, it implies the same questions about program priorities, target group priorities, and the meaning of "fair share" set forth with respect to issues 1 and 2.

4. What role should educational entitlements play in increasing educational opportunities for older adults?

Several forms of legislated educational entitlement for adults have been recommended as ways to improve the access of adults to formal education. As these and other proposals are considered, the special needs of older persons must not be ignored. Because any "universal" adult entitlement program would be extremely expensive, this issue must be addressed in terms of three closely related questions. First, among the alternatives for financing education for older adults, what role, if any, should entitlements play? Second, if entitlements are endorsed in principle, what should be the priorities in establishing a system for older adults or including them? For example, a carefully delimited demonstration program might be recommended, or entitlements might be advocated only for a specific type of program such as job training or retirement preparation, or for a specific group such as the educationally disadvantaged. The third is a reciprocal question: To what extent should the cost of various types of educational programs be borne by older adults themselves?

5. How can the provision of information and counseling about educational opportunities for older adults be improved?

Many authorities are convinced that older persons' access to educational programs can be vastly improved simply by improving their access to knowledge of the range of existing opportunities, and providing counseling to help them participate in the programs that best meet their needs. But this raises several policy questions. To what extent do educational information and counseling services for older persons need to be expanded? How can the expansion be linked to current efforts in education to expand information and counseling for all adult age groups, and to the information and referral systems in aging? How can these two aspects of the effort be coordinated?

6. What roles should business and industry, voluntary agencies, and other private organizations play in expanding educational opportunities for older adults?

Funding and sponsorship of adult education programs by business and industry, trade unions, foundations, organizations of older persons, and community agencies are among the most important resources available in most communities. One question that this raises involves the types of education to which funding by one or another of these sources should be directed. Other questions concern the mechanisms by which such funding can be utilized and how the programs supported or sponsored by these sources can be coordinated with other community programs.

7. What steps should be taken to increase opportunities for older persons to participate in education as educators as well as learners?

Although thousands of older persons are already involved in providing educational services, many thousands more have the potential to contribute to formal and informal education as volunteers or through paid employment. Realizing this untapped potential will require more than an extension of current efforts. It will demand new ways of utilizing older persons, better methods for letting them know about existing opportunities, innovative programs to improve the skills of those who have the desire to serve, and other efforts. Questions of responsibility, leadership, and the role of public and private agencies are as relevant to this issue as they are to those discussed above.

B. Issues concerning education of personnel to serve the elderly:

1. Where does the responsibility lie for achieving and assuring high quality in the proliferating programs intended to provide personnel for service provision?

No one questions the fact that existing training programs differ widely in quality as well as in intent and content. To raise this issue is to ask many additional questions in turn: Has the time come to accredit education and training programs in gerontology? If so, by what organizations? Would it be the traditional professional organizations such as the American Medical Association, the Council on Social Work Education, the American Psychological Association? Or the newer Association for Gerontology in Higher Education? Others? Or, instead of (or in addition to) accrediting programs, should personnel serving the elderly be licensed? Again, by whom? What other mechanisms for assuring the quality of programs should be explored? What is the role of the national professional associations in education?

2. What mechanisms can be devised to assure the transfer of knowledge about aging across disciplines and among practitioners?

We know from the Foundations project, cited earlier in this report, that many educators and professional practitioners believe there are commonalities in knowledge that are important for all those who will work with or on behalf of the aging. The diversity of bodies of knowledge about aging, the scattered and fragmentary nature of this knowledge, and the separation among the many professions and other service providers all complicate this issue. Recognizing

the realities of "turf" building and protection and the already-voluminous content of many professional curricula, what mechanisms can be developed so that disparate groups can become familiar with one another's bodies of knowledge? How can essential knowledge be identified, organized, and incorporated into training?

3. With an increasingly elderly population, the need to prepare adequate numbers of individuals to serve the elderly, and the lead time required to train such personnel, what types of studies must be developed in order to make accurate projections of personnel supply and requirements as a basis for education and training policy?

Projections of the numbers of educators, researchers, and practitioners concerned with the elderly and the need for such personnel provide the basis for public policy regarding education and training. The development of personnel projections is increasingly complex because of the multidisciplinary nature of the problems and service needs of the elderly and the current reactive debates in the field regarding the most appropriate combinations of services for meeting those problems and service needs. This raises the issues of identifying current information gaps, determining what types of studies (based on what types of assumptions) are needed to fill those gaps, and who should sponsor and conduct such research.

4. With the growing recognition of the importance of educating health workers to serve an increasing older population, what priority should be given to gerontology education as a part of more focused health professional orientation?

Gerontological courses, programs, clinical rotations (experiences) and/or specialties could be fostered and instituted for health and allied health professions schools, including those for physicians, nurses, dentists, pharmacists, physical therapists, and others. This issue raises questions about the types of health workers, if any, who should receive education about aging, who will provide such training, and by what means the needed educational developments can be fostered. Also, to what extent can such developments be furthered by specific governmental initiatives, and to what extent must they await the judgment of their necessity by the respective health and allied health professions?

5. What should be the nature of the relationship between gerontology education programs in higher education institutions and funding agencies?

Many assume that "He who pays the piper calls the tune," but educators often disagree. Should this assumption characterize the relationship of public funding agencies to institutions of higher education and other education and training bodies? Could a new policy be developed that would better serve needs of both groups? Is it possible for educational institutions, organizations of institutions (such as the Association of American Universities, the American Association of Community and Junior Colleges, the Association for Gerontology in Higher Education), governmental agencies, and professional organizations (such as the American Association of University Professors, the National Education Association, the American Federation of Teachers, the American Association for Adult Education) to work together to develop a long-range educational philosophy based upon the changing characteristics of the older population and consequently its changing needs? How can educators be involved in the development of such a policy?

C. Issues concerning education about aging:

1. What specific steps should be taken to ensure that appropriate materials on aging are introduced into the curricula of elementary, middle, and high schools?

The issue posed here is not whether material on aging should be introduced into school curricula but rather how and to what extent it can be when schools and teachers are constantly being asked to include new materials in the curriculum. Can materials on aging be included in ways that will enhance other studies? How can the experience of successful efforts best be transmitted to other schools? To what extent can older persons be utilized as resource persons to promote education about aging?

2. What steps should be taken to prepare teachers to include knowledge about aging in school curricula?

It must be recognized that one of the barriers to the inclusion of knowledge about aging in school curricula is that teacher education has not prepared teachers for this task. Teachers who are already in service and those who will be entering the profession must be well-prepared if education about aging is to be implemented appropriately through the schools Furthermore, the rapid development of our knowledge about aging and society's response to older persons means that we must also have mechanisms for ensuring that teachers have opportunities for renewing their knowledge. How can these tasks be accomplished?

3. What are the best mechanisms for creating a sensitivity to and understanding of older persons in the many occupations and situations in which younger persons have any casual contact with the aged?

In a society like ours much of the older person's relationships are casual and impersonal—with salespeople, maintenance workers, police, and many others. Yet the attitudes and responses of all these contribute to, or detract from, life satisfaction in the later years. Sensitivity to the nuances of interaction with older people can facilitate rewarding relationships and contribute to the older persons' sense of dignity. This issue poses the question of how we can best create that sensitivity.

4. What role can the mass media play in education about aging?

We recognize that this issue will be discussed by the Committee on Media and Aging. However, a report on education about aging would be seriously incomplete if it did not at least draw attention to the enormous potential of the media for education about aging. This issue poses a question of how that potential can best be realized.

D. Cross-cutting issues:

1. How can we improve participation in formal and informal education programs by older adults, including those who face the special barriers of low educational attainment, of minority status, of physcial handicap, and of poverty?

This is a cross-cutting issue because these special barriers limit access not only to learning opportunities but also to opportunities for service and training. What types of special programs, what kinds of outreach activities, and what sponsorships are most likely to be effective in providing opportunities to these underserved groups? How is it possible to involve representatives of such groups in program planning and determining program priorities?

2. How can the anticipated expansion of various forms of telecommunications best be utilized?

Telecommunications is one of the most rapidly developing and expanding areas of technology. It offers limitless possibilities for education, and could prove especially important to older persons, who already make significant use

of television as a source of learning as well as entertainment. But the potential has barely been touched and may not be well understood by older persons or service providers, including many educators. This issue raises the question of how knowledge of these potentials can best be shared, as well as questions concerning their actual use. A sub-issue is how to take advantage of telecommunications technologies in ways that will enhance the social interaction of older persons rather than isolating them.

3. How can research bearing on education and aging be advanced and coordinated?

The need for more and better knowledge regarding education and aging is crystal clear. Of equal clarity is the fact that there are a number of federal agencies with responsibilities that bear on education and aging. At the persent time such federal agencies as the Department of Education, the Department of Labor, the Department of Health and Human Services, the Department of Agriculture, and the Veterans Administration are sponsoring a wide range of research and teaching programs that bear directly on education and aging. How can these efforts be coordinated?

VII. RECOMMENDATIONS

It is the considered opinion of the Technical Committee on Education that education is not only an inherent right of all age groups, it is a necessity for a society struggling to achieve a fuller measure of social justice for all Americans irrespective of age, race, sex, economic status, color, or national origin. Specifically, it is our collective judgment that older people are entitled to have access to a full range of educational programs in keeping with their needs and interests.

Delegates to the White House Conference will have an opportunity to move this nation toward the achievement of that goal by voicing their recommendations for policy and action. This section offers a number of recommendations for their consideration. Although it represents but a few of the many concerns delineated in this report, it is hoped that this limited list of suggested recommendations will be useful as a starting point for debate as the final set of recommendations on education and aging is shaped by the Conference. We are confident that the delegates, like this committee, will base their decisions on a fundamental conviction: that educating the elderly, educating personnel to serve the elderly, and educating all age groups about aging and the aged are necessary goals if we are to remain a free and democratic society.

Recommendation 1: The Role and Responsibilities of The Federal Government

a. A complete range of basic education programs to improve the economic, health, and social functioning of the elderly should be given the highest priority for funding and made available and accessible to all older Americans immediately. These must be offered under a wide variety of auspices, including both public and private organizations, agencies, and institutions. High on the list should be job training and retraining programs and vocational rehabilitation programs. This action will represent a major step in the march toward realizing entitlement to education for the elderly.

b. A single public body should be designated to review the programs discussed in paragraph "a" and should be given the necessary resources to evaluate the programs conducted by relevant federal agencies (e.g., Education, Health and Human Services [particularly the Administration on Aging], Labor, Agriculture, Housing and Urban Development, Community Services Administration) in carrying out their respective endeavors. Because the 1980 amendments to the Higher Education Act call for the establishment of a Commission on National Developments in Postsecondary Education to study related issues, it might be appropriate that its mandate be extended to include this responsibility. The designated unit should collect data about programs, identify barriers to their utilization by older persons, and distribute an evaluative report on educational opportunities for the elderly on a biennial basis.

c. The quality of educational services, and all other services available to the aged, depends directly on the quality of the personnel who provide them. The Federal Government needs to work with institutions of higher education, as well as professional and scientific organizations, to develop an educational strategy to prepare personnel to serve the growing and changing older population more effectively. One part of the educational strategy to meet personnel needs over the next decade should be to consider how the roles and responsibilities of professionals in fields such as health and education may be reshaped so that the elderly are better served. It must be recognized that changes in traditional professions and disciplines and the development of new career lines will take considerable time to accomplish. Therefore, the Federal Government is urged to give greater and longer term financial support to education programs designed to prepare personnel to serve the elderly. Further, it is recommended that such education programs be viewed as an integral part of a broad strategy intended to improve health and human services, housing services, and other programs planned to assist the elderly.

d. Many of the problems encumbering the aged are due to the lack of scientific knowledge about the processes of normal aging, the aging society, and the circumstances of older people. To improve education and service programs it is recommended that funds be increased immediately for research and research training. Such a strategy must allow for the expansion of investigator initiated research as well as government directed research. Research and research training must be concentrated in the nation's colleges and universities to ensure the preparation of personnel able to maintain and improve the gerontological research enterprise in this nation. It must be emphasized that increased research funding and activities must be undertaken by many Federal agencies (e.g., Education, Health and Human Services, Labor, Agriculture, Veterans Administration, Energy), because the range of problems affecting the aged and the aging society cut across departmental domains. To guarantee a greater degree of cooperation among the relevant agencies, one unit should be selected by the President, or designated by the Congress, to inventory all aging related research and to publish periodic reports.

e. The deleterious effects of ageism have not permitted the elderly to participate fully in the shaping and management of our society. As a means of expanding opportunities for older Americans to increase their contributions to this nation, it is recommended that the U.S. Commission on Civil Rights, or some other appropriate body, be directed to fully investigate and document the nature and scope of age prejudice and discrimination in the United States. Further, it is recommended that the designated agency prepare a series of recommendations detailing intervention strategies—including the use of educational programs and the media—to better inform the American public about the processes of normal aging and the responsibilities, contributions, and potential of the aged.

Recommendation 2: The Role and Responsibilities of State Government

a. State governments will continue to share responsibility for educational programs with the Federal Government and the private sector. Therefore, the Committee recommends that each State designate a unit of its government, working in the fields of education and/or aging, to define and rank priorities regarding the educational needs of its elderly citizens. These units should be granted adequate resources for a leadership role in the development of needed programs by appropriate agencies of government, educational institutions, and other public and private organizations in their

respective States. Each State should collect data about the programs and levels of participation. A public report should be prepared and distributed biennially.

b. The abovementioned units of State government are requested to launch an immediate investigation of financial aid programs in the field of education, including those funded by the Federal Government but administered by the States, to make certain that discriminatory policies and practices based on age are identified and eliminated.

Recommendation 3: The Role and Responsibilities of Educational Institutions and Professional and Scientific Organizations

a. As our society is aging, it is also experiencing other profound changes as a result of the technology explosion and urbanization. These and other societal changes have extraordinary implications for educational institutions, professional associations, and scientific societies. It seems likely that multiple careers and reeducation programs will be much more commonplace—indeed essential—in the immediate future. Therefore, it is incumbent on national organizations of educational institutions (e.g., American Council on Education, Association of American Universities, American Association of Community and Junior Colleges, National Association of State Universities and Land Grant Colleges) to launch studies to familiarize their member institutions with the changing role of education in our aging society. To guarantee equal access to all educational programs by older people, studies should focus on policies and practices—in such areas as admissions, financial aid, course content and location, and teaching methods—that presently serve to exclude or minimize the participation of older adults. Studies should also examine the need for inclusion of knowledge about aging in teacher preparation programs and in the curricula for many fields of study and for students at all age levels.

b. In a similar vein, scientific societies and other associations of professionals, including such varied groups as the National Education Association, the American Psychological Association, and the American Nurses Association, to name only a few, must devote more time and attention to the implications of an aging society for their respective memberships. It is their responsibility to delineate the ways in which their members can and should better serve the aged and increase public understanding about the effects of an aging society on all age groups and social institutions.

Recommendation 4: The Role and Responsibilities of Organizations in The Private Sector

a. It is essential that private organizations—including business, industry, trade unions, and voluntary health and social welfare agencies—take whatever steps are necessary to guarantee appropriate accessibility to older adults in all educational programs they fund and/or sponsor. Particular efforts should be undertaken to guarantee the inclusion of the elderly who may be handicapped by poverty, illness, disability, social isolation, gender, or minority status. Due to the fragmentation of the private sector, it is impossible to recommend specific actions to be taken, but it is important that such organizations be alerted to their responsibilities in regard to both educational opportunities for the elderly and public education about aging. In the case of nationally organized units of private and voluntary organizations—ranging from the United States Chamber of Commerce to the United Way of America, AFL-CIO, and YMCA and YWCA and including many other kinds of groups—we believe it is incumbent upon their leadership to put in motion steps to guarantee that educational programs under their auspices provide the broadest possible opportunities for the elderly to participate as planners, teachers, and learners.

APPENDIX: DATA BASE

For the reader who wishes to examine further the statistical basis for assessing education as it relates to aging, several tables and charts are provided in this Appendix. The following additional notes about existing studies may also be helpful.

Information on the relationship of older adults to the educational system is seriously incomplete. However, much has been learned in the past decade—due, in part, to a generally increased interest in adult learners. Between 1969 and 1978, for example, more than thirty major, large-scale surveys of adult learners were reported. Among the most important are the triennial surveys of the National Center for Education Statistics (NCES). Defining the adult learner as "persons seventeen or older, not enrolled full-time in high school or college, but engaged in one or more activities of organized instruction," these national surveys provide basic data concerning the participation and characteristics of adult learners in various age groups and changes and trends in adult learning.[54] As a result of analyses of these data, we now have at least a partial understanding of the utilization of educational resources by older persons.

Our understanding is partial because the types of information collected in the NCES surveys are limited. For example, data on self-directed education are missing as are data on what can be called incidental or secondary learning: the learning that is a product of such non-educational activities as travel or a visit to a museum or using mass media, or the learning that is a product of contacts with friends, neighbors, and professional persons. More important, the data are limited for the most part to a relatively small number of essentially demographic variables and variables descriptive of the organized instruction in which adult learners have been engaged.

As a result we have virtually no systematic information on the socio-psychological factors that undoubtedly influence the utilization of education by older adults. We know almost nothing, for example, about the attitudes toward education held by older adults or how they were formed, or how these attitudes influence participation. We are equally in the dark concerning the perceptions that older adults have of themselves as learners, or the extent to which those perceptions influence their interest in education. We know very little about the amount of information various categories of older persons have about educational opportunities, or about their access to such information on a continuing basis. A list of the kinds of knowledge that would be helpful in the development of a policy on education for older adults could be extended almost indefinitely.

To draw attention to the gaps in our knowledge is not to denigrate the data currently available. These data constitute a tremendous step forward from where we were scarcely a decade ago. Rather, the gaps demonstrate the need for research on education and aging in many areas. It is probable that such research has been lacking precisely because education for older adults has not been a high priority in American society or a high priority for most older persons.

Apart from the development of systematic information concerning older adults as participants in education, there has also been a significant increase in descriptive studies of educational opportunities for older persons during the past decade. Publications of the Academy for Educational Development and the American Association of Community and Junior Colleges, for example, include information on various types of collegiate and other educational programs for older adults and guidelines for the planning and implementation of programs.

A survey conducted by the Association for Gerontology in Higher Education, published in 1976 as the *National Directory of Educational Programs in Gerontology*, provided information on 1,270 postsecondary institutions providing educational programs for older adults or one or more courses to prepare students to work with older adults.[55] Although it is already out of date, it represents the first systematic attempt to gather data of this type. Other information on education to prepare persons to work with older people can be found in sources such as the Foundations project and the RAND study referred to in the text. Various professional associations have also published materials related to the aging content regarded as important in education for their respective professions.

The Committee knows of no broad systematic survey of any aspect of education about aging. However, numerous descriptions of specific programs are available. As new data become available, reports may often be found in journals in adult education and gerontology.

SOURCES OF ADULT EDUCATION
BY AGE GROUP

1978

SPONSOR	AGE GROUP		
	All 17 years and older	55-64 years	65 years and over
	(percent)	(percent)	(percent)
Elementary, Junior, High School	9.43	9.16	10.17
2 Year College and Institute	18.42	12.21	17.57
4 Year College and University	19.62	12.60	9.38
Vocational, Trade, Business Schools	6.69	3.84	2.77
Tutor or Private Instructor	4.63	7.04	6.61
Business and Industry	10.95	11.67	4.76
Labor Org. or Professional Assoc.	3.76	6.11	2.25
Government Agency	8.46	12.21	11.89
Private Community Organization	8.29	10.68	19.82
Other	6.62	8.71	11.89

Source: *National Center for Education Statistics, 1978 Survey of Participation in Adult Education*

MAIN REASON FOR TAKING COURSE

REASON	AGE GROUP		
	All 17 years and older	55-64 years	65 years and over
	(percent)	(percent)	(percent)
Job-Related Reason	52.68	48.55	16.15
For General Education	12.54	7.09	14.40
For Personal or Social Reasons	31.21	41.01	64.46
Other Non-Job-Related Reasons	2.87	2.76	4.62
Not Reported	.69	.59	.40

Source: *National Center for Education Statistics, 1978 Survey of Participation in Adult Education*

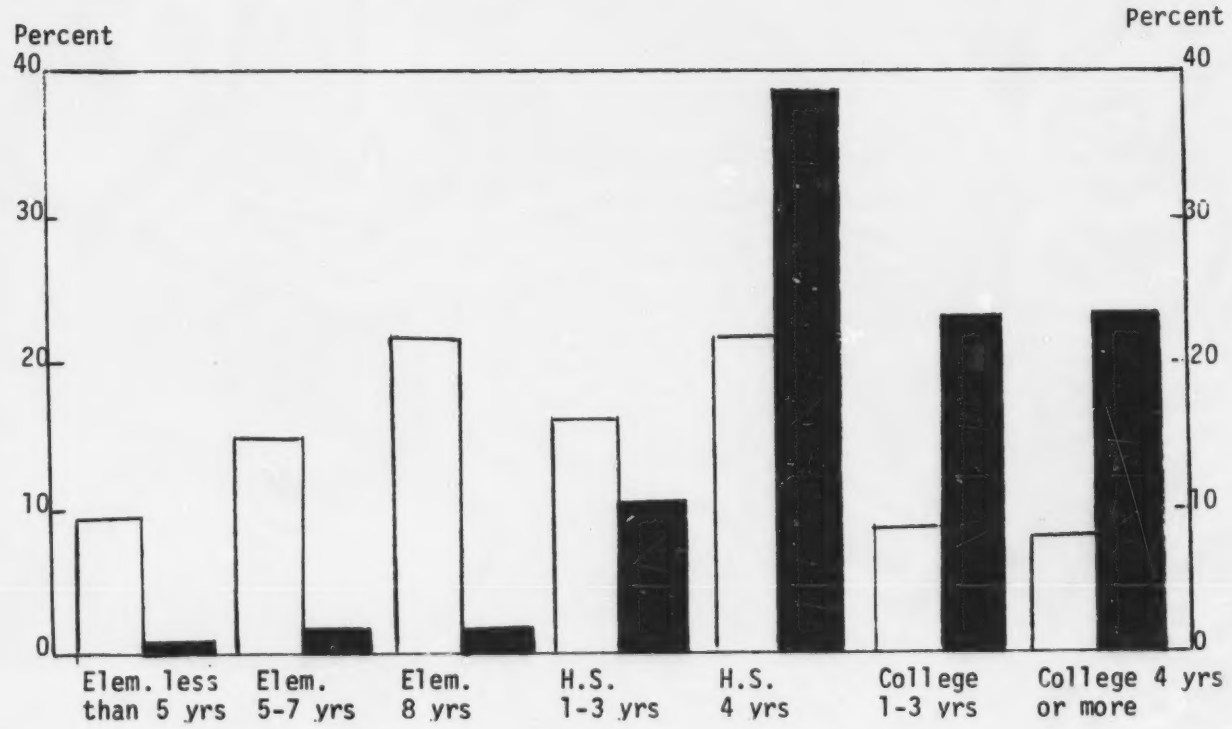
PARTICIPATION IN ADULT BASIC AND SECONDARY EDUCATION PROGRAMS
BY RACE OR ETHNIC GROUP, SEX AND AGE GROUP
UNITED STATES AND OUTLYING AREAS

1977

Race or Ethnic Group and Age	Total	Male	Female
Total Participants			
All Ages	1,686,276	729,709	956,567
Age 16-44	1,368,944	614,772	754,172
Age 45-64	223,927	81,199	142,728
Age 65+	93,405	33,738	59,667
American Indian/Alaskan Native			
All Ages	21,475	9,500	11,975
Age 16-44	18,185	8,187	9,998
Age 45-64	2,595	920	1,675
Age 65+	695	393	302
Blacks			
All Ages	391,713	164,554	227,159
Age 16-44	318,251	137,958	180,293
Age 45-64	52,135	18,880	33,255
Age 65+	21,327	7,716	13,611
Asian/Pacific Islander			
All Ages	133,129	52,383	80,746
Age 16-44	104,460	41,248	63,212
Age 45-64	19,523	7,310	12,213
Age 65+	9,146	3,825	5,321
Hispanic			
All Ages	377,217	170,260	206,957
Age 16-44	314,536	146,605	167,931
Age 45-64	43,618	15,904	27,714
Age 65+	19,063	7,751	11,312
White and Other			
All Ages	762,742	333,012	429,730
Age 16-44	613,512	280,774	332,738
Age 45-64	106,056	38,185	67,871
Age 65+	43,174	14,053	29,121

Source: United States Department of Health, Education, and Welfare, National Center for Educational Statistics, unpublished data from Survey of Adult Basic Education Statistics, 1977.

PERCENT OF PERSONS 65 YEARS AND OVER AND 25 TO 29 YEARS,
BY YEARS OF SCHOOL COMPLETED: MARCH 1978



Source: *Social and Economic Characteristics of the Older Population: 1978, Bureau of the Census*

MEDIAN YEARS OF SCHOOL COMPLETED

1940 - 1979

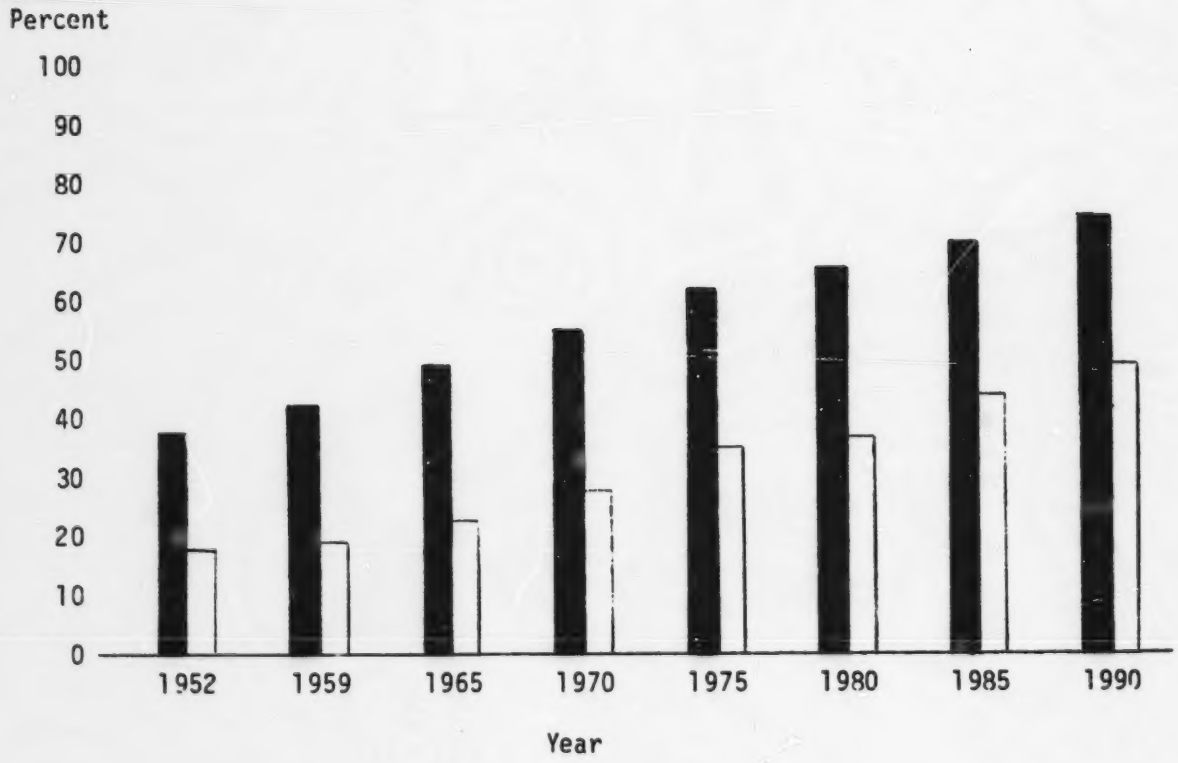
Age and Sex	Year								
	1940	1950	1960	1970	1975	1976	1977	1978	1979
35-54 Years Old									
Total*	8.6	9.7	11.3	12.3	12.4	12.4	12.5	12.5	12.5
Male	8.5	9.6	11.1	12.3	12.5	12.5	12.5	12.6	12.6
Female	8.7	9.7	11.6	12.3	12.4	12.4	12.4	12.4	12.5
55+ Years Old									
Total*	8.2	8.3	8.5	9.2	10.8	11.7	11.3	11.8	11.9
Male	8.1	8.2	8.4	9.0	10.5	11.0	11.2	10.4	11.8
Female	8.3	8.4	8.6	9.5	10.9	11.3	11.4	10.6	11.0

*Total includes persons who did not report on years of school completed

Source: 1970, and 1975-1979 March Current Population Survey, noninstitutional population, excluding members of the Armed Forces living in barracks, 1960 Census of Population; 1950 Census of Population; and 1940 Census of Population, resident population.

PERCENT OF HIGH SCHOOL GRADUATES FOR THE POPULATION
65 YEARS OLD AND OVER AND 25 YEARS OLD AND OVER

1952-1990



Source: *Current Population Reports, Special Studies Series P-23, No. 59 Issued May 1976*

PERCENTAGES OF OLDER PEOPLE IN EDUCATING ROLES
BY TYPE OF INSTITUTION

Type of Institution	Activity or project leader	Resource person/special lecturer	Teacher	Tutor	Group leader	Educational advisory committee member	Teaching aide	Library aide	Curriculum consultant	Counselor	Administrator of an education program	Media production person	Creator of educational games & classroom materials	Researcher	Tour guide or docent	Other
School district	*	22	10	36	-	*	14	9	1	*	*	*	4	*	-	2
Two-year college	-	27	32	3	-	4	10	3	7	2	3	*	*	3	-	6
Senior college or university	-	17	40	5	-	2	3	6	7	2	10	-	-	3	-	5
Institute of Lifetime Learning	4	7	19	*	42	10	-	-	4	2	3	2	-	*	-	6
Museum	16	20	11	-	5	1	-	3	*	-	*	2	-	9	27	5
Senior center or club	25	21	19	4	16	7	*	*	2	2	1	3	-	1	-	*
Public library	7	17	5	5	2	1	-	27	*	*	*	12	-	3	5	16
YM-YWHA or Jewish community center	21	18	22	4	14	13	-	2	4	1	*	-	-	*	-	*
YWCA	27	15	19	5	14	10	*	-	2	2	*	2	-	*	-	3
YMCA	19	17	12	4	12	9	-	-	3	3	*	4	-	1	-	14
4-H club	49	11	13	2	15	7	-	-	1	1	*	*	*	*	-	*

*Less than 1 percent

Source: Never Too Old To Teach, Academy for Educational Development, 1978

AVERAGE NUMBER OF ADULTS IN
EDUCATIONAL ROLES AT 2,426 INSTITUTIONS

Type of Institution or Organization	Average number of older adults per institution
School districts	35*
Two-year colleges	12
Senior colleges and universities	8
Institutes of Lifetime Learning	33
Museums	16
Senior centers and clubs	33
Public libraries	7
Jewish community centers & YM-YWHAs	30
YWCAs	15
YMCAs	9
4-H clubs	21

*This figure represents the average per school district, not per school

Source: *Never Too Old To Teach, Academy for Educational Development, 1978*

FIFTEEN MOST COMMON EDUCATIONAL ROLES
OLDER ADULTS PERFORM AT 2,426 INSTITUTIONS

Role	Percentage of older adults	Number of older adults
Activity or project leader	23.1%	11,888
Resource person or special lecturer	17.6	9,048
Teacher	15.3	7,893
Tutor	12.1	6,235
Group leader	9.4	4,837
Educational advisory committee member	4.6	2,370
Teaching aide	4.5	2,338
Library aide or librarian	3.4	1,746
Curriculum consultant	2.1	1,100
Counselor	1.2	635
Administrator of education program	1.2	617
Media production staff member	1.1	575
Creator of educational games & classroom aids	1.0	535
Researcher	.9	462
Tour guide or docent	.6	291
All other	1.9	979
Total	100.0%	51,549

Source: Never Too Old To Teach, Academy for Educational Development, 1978

NOTES

1. Katharine Barry, "My Turn: Shape Up, Kiddies," in Newsweek, August 11, 1980, p. 13. Copyright 1980 by Newsweek, Inc. All rights reserved.

2. U.S., Department of Education, National Center for Education Statistics, Digest of Education Statistics 1980, p. 1.

3. Allen Tough, The Adult's Learning Projects (Toronto: The Ontario Institute for Studies in Education, 1971), p. 4.

4. John Dewey, Reconstruction in Philosophy (New York: Henry Holt, 1920), p. 185.

5. Howard Y. McClusky, Background and Issues: Education (Washington, D.C.: White House Conference on Aging, 1971), p. 1.

6. U.S., Congress, House, Select Committee on Aging, American Attitudes Toward Pensions and Retirement, 96th Cong., 1st sess., 1979, p. 15.

7. Louis Harris and Associates, The Myth and Reality of Aging in America (Washington, D.C.: National Council on the Aging, 1975).

8. Clark Tibbitts, "Education," in Harold R. Johnson, ed., Academic Gerontology: Dilemmas of the 1980's (Ann Arbor: Institute of Gerontology, The University of Michigan, 1980), p. 76.

9. Ibid.

10. Larry Coppard, "Lifelong Learning, and the Elderly," Strategies for Lifelong Learning, Proceedings of a Seminar at Brandbjerg Højskile, Jelling, Denmark. Forthcoming, 1981.

11. Tough, p. 1.

12. National Center for Education Statistics, Participation in Adult Education, 1978. "Participants in Adult Education, by Age Group and Population Characteristic: United States, Year Ending May 1978," pre-publication table dated 4/1/80.

13. U.S., Department of Commerce, Bureau of the Census, Current Population Reports, Special Studies Series P-23, No. 59, May 1976.

14. Carol Florio, Collegiate Programs for Older Adults: A Summary Report on a 1976 Survey (New York: Academy for Educational Development, 1978), p. 46.

15. Tibbitts, p. 69.

16. See, in addition to other sources cited subsequently, the Carnegie Commission on Higher Education, Toward a Learning Society (New York: McGraw-Hill, 1973); relevant publications of the Academy for Educational Development; and A.J. Cropley, Lifelong Education: A Psychological Analysis (Oxford: Pergamon Press, 1977).

17. National Center for Education Statistics, Participation in Adult Education, 1978.

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Although this study is based upon a multivariate analysis of data from the NCES 1975 survey, similar findings have been reported by other investigators. See also Patricia Cross, "Adult Learners: Characteristics, Needs, and Interests," in Richard E. Peterson and Associates, Lifelong Learning in America (San Francisco: Jossey-Bass Publishers, 1979).

20. Anderson and Darkenwald, p. 5.

21. Ibid., p. 4.

22. U.S., Department of Health, Education, and Welfare, Office of Human Development Services, National Clearinghouse on Aging, Some Prospects for the Future Elderly Population, January 1978, p. 10.

23. U.S., Department of Commerce, Bureau of the Census, Current Population Reports, Special Studies Series P-23, No. 85, August, 1979, p. 16.

24. National Center for Education Statistics, Participation in Adult Education, 1978.

25. K. Patricia Cross, "A Critical Review of State and National Studies of the Needs and Interests of Adult Learners," in Charles B. Stalford, ed., Conference Report: Adult Learning Needs and the Demand for Lifelong Learning (Washington, D.C.: National Institute of Education, November 1978), p. 10.

26. Bernice Neugarten, "Education for Long Life," Northwestern Educator, Spring 1981.

27. Cross, "Adult Learners: Characteristics, Needs and Interests," in Lifelong Learning in America, p. 106. See also John W.C. Johnstone and Ramon J. Rivera, Volunteers for Learning (Chicago: Aldine Publishing Co., 1965).

28. Johnstone and Rivera, pp. 217-218.

29. Johnstone and Rivera, p. 108.

30. Carol Barnes, "Faculty Attitudes Toward the Older Adult Learner," Indiana University East, 1980. (Mimeographed.)

31. See, for example, Lillian L. Glickman, Benjamin S. Hersey and Ira I. Goldenberg, Community Colleges Respond to Elders: A Sourcebook for Program Development (Washington, D.C., U.S. Government Printing Office, 1975).

See also Ann Florio, Collegiate Programs for Older Adults (New York: Academy for Educational Development, 1978).

32. The National Committee on Careers for Older Americans, Older Americans: An Untapped Resource (New York: Academy for Educational Development, 1979).

33. Ibid., p. 48

34. Judith Murphy and Ann Florio, Never Too Old to Teach (New York: Academy for Educational Development, 1978), p. 10.

35. U.S., Congress, An Act to Amend the Older Americans Act of 1965, Pub. L. 93-29, 93rd Congress, 1973, Title I, Sec. 101.

36. Pamela H. Christoffel, "Current Federal Programs for Lifelong Learning: A $14 Billion Effort," School Review 86 (May 1978): 348-359.

For a broader discussion of issues related to Federal support of lifelong learning, see Terry W. Hartle and Mark A. Kutner, "Federal Policies: Programs, Legislation, and Prospects," in Peterson and Associates, Lifelong Learning; and Ellen Hoffman, The Federal Role in Lifelong Learning (New York: Direction Papers in Lifelong Learning, College Entrance Examination Board, 1980).

37. U.S., Congress, Senate, Special Committee on Aging, Memorandum 12, (December 19, 1980).

38. For a review of State activities in lifelong learning, including examples of activities on behalf of the elderly, see Susan A. Powell, "State Policies: Plans and Activities," in Peterson and Associates, Lifelong Learning.

39. Seymour Lusterman, Education in Industry (New York: The Conference Board, 1977), in Hoffman, The Federal Role in Lifelong Learning.

40. McClusky, p. 20.

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52. Drea Zigarmi and Kay Trusty, "Teaching About Aging" (Ohio Association for Supervision and Curriculum Development, Summer 1978).

53. Howard Y. McClusky, "Education and Aging" in Harold R. Johnson, ed., Academic Gerontology: Dilemmas of the 1980's (Ann Arbor: Institute of Gerontology, The University of Michigan, 1980), p. 87.

54. The definition used for the 1978 survey also excludes persons enrolled full-time in occupational programs of more than six months duration. Because the number of older adults who are full-time students in a high school, college, or occupational program is very small, these changes have only a small effect on data relating to older learners as such. They have a greater effect on statistics which compare older learners with the total population of adult learners.

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*U.S. GOVERNMENT PRINTING OFFICE : 1981 0-72-0019/6895

The following Technical Committee Reports have been published:

Retirement Income
Health Maintenance and Health Promotion
Health Services
Social and Health Aspects of Long Term Care
Family, Social Services and Other Support Systems
The Physical and Social Environment and Quality of Life
Older Americans as A Growing National Resource
Employment
Creating an Age Integrated Society: Implications for Societal Institutions
Creating an Age Integrated Society: Implications for the Economy
Creating an Age Integrated Society: Implications for the Educational Systems
Creating an Age Integrated Society: Implications for Spiritual Well-Being
Creating an Age Integrated Society: Implications for the Family
Creating an Age Integrated Society: Implications for the Media
Creating an Age Integrated Society: Implications for Governmental Structures
Research in Aging

Experts from various fields were appointed by the Secretary of Health and Human Services to serve on 16 Technical Committees, each charged with developing issues and recommendations in a particular area for consideration as background material for the delegates to the 1981 White House Conference on Aging.